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Children's Aesthetic Perception: A Developmental Study of Judgements and Attitudes Concerning the Drawings and Paintings of Children

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CHILDREN'S AESTHETIC PERCEPTION: A DEVELOPMENTAL STUDY OF JUDGMENTS AND ATTITUDES CONCERNING THE DRAWINGS AND PAINTINGS OF CHILDREN

A Thesis

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ABSTRACT

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A DEVELOPMENTAL STUDY OF JUDGMENTS
AND ATTITUDES CONCERNING THE
DRAWINGS AND PAINTINGS OF CHILDREN

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Though children's aesthetic sensitivity has been explored quite extensively in recent years, studies of this subject have been confined to children's response to adult art. In this study two sets of stimulus materials were devised, which enabled the examiner to elicit children's responses to their own artistic productions, as well as those of other children of similar age. The subjects in this first study were kindergarten children, 5-6 years old, who were interviewed individually about their own artistic productions and the media they employed in creating them.

The second study extended the age range to include students from kindergarten through second grade, ages 5-8, and employed a set of stimulus materials representing the art work of children 5-9 years of age. Subjects were interviewed individually by the examiner and questions were devised to elicit response to a variety of aesthetic considerations.

Students in both groups showed evidence of aesthetic sensitivity in their preferences, in critical comments and in their awareness of the developmental nature of art. Children in the first study, which employed both production and perception tasks, displayed greater enthusiasm as well as greater sensitivity to aesthetic elements. Both studies identified a strong cognitive-developmental component in aesthetic responding, evident not only in children's changing views and responses, but in their awareness of skills and abilities. Children gave evidence of reflection, interest, and a dialogue between production and perception. The studies confirm the presence of, and the developmental nature of aesthetic awareness in young children.

TABLE OF CONTENTS

LIST OF TABLES

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C H A P T E R I

INTRODUCTION

As early as 1885 interest was shown in the creative nature of children, as expressed in their paintings and drawings, as well as in effective methods for educating them in the arts, Frank Cizek, in 1885, began a collection of child arts which he presented to his colleagues in Vienna. Cizek considered the art of children to be "a recapitulation on the individual level of primitive art invention and a source of the primal creative form that adults use to renew the authenticity of their own work." (in Leeds, 1985.) In 1908 he and his secessionist artists filled the entire entrance room to their Keinshaw Gallery with his collection of children's art. This act was an indication that they considered this work an important art form, an aesthetic contribution to be taken as seriously as their own work.

Over the years most psychologists and educators have dealt almost exclusively with the observable, measurable outcome or product of child art, and the stages through which artistic growth can be traced. Some, among them Lowenfeld and Brittain (1968), have evolved tabular records of the ages and stages through which children's drawings progress. Rhoda Kellogg (1969), in an extensive collection of children's early artistic production, has meticulously recorded developmental stages, from scribbles to designs

and eventually pictorial representation. Lark-Harowitz, Lewis and Luca (1973), have provided detailed developmental studies as well. Views among these writers differ in regard to the ways in which children learn, and thus also in the suggested techniques for educating children in the arts. These authors, though recognizing child art as significant in its productive aspect, give little if any attention to the artistic appreciation of the child, his views of his own work and that of his peers, or to his emerging aesthetic sensitivity. We find among these writers a suggestion that aestheic considerations are probably best delayed until adolescence. Lark-Horowitz, Lewis and Luca (1973) suggest that the only interest of the preschool child is in productive activity, and state that "only during adolescence does the aesthetic attitude break through" (p.224). In his book, Creativity, Art and the Young Child, Brittain observes that while young childen do have the urge to "draw and paint in ways they think of as being pretty, beautiful, nice and aesthetically pleasing" this is not to be regarded as contemplative behavior because children do not change or alter paintings once they are completed (1975, p. 165). He also notes that young children take similar "aesthetic pleasure" in other activities. He does not, however, address the source of the child's aesthetic impulses or his desire to create something aesthetically pleasing.

If aesthetics is viewed as a late developing phenomenon, then art education should be geared accordingly. Ralph Smith states,

> it is in the early years that he (the child) is forging the cognitive powers and concepts that in later years he will refine and come to understand more formally. The secondary grades and the years afterward are the ideal time for the type of aesthetic education I have discussed. (1972, p. 48)

Rudolf Arnheim (1969, 1971), while emphasizing the importance of visual perception or visual thinking in the making of art, and acknowledging the child's competence in some aspects of representation, also states that "what is most needed is not more aesthetics or more esoteric manuals of art education, but a convincing case made for visual thinking quite in general" (p. 3). Arnheim, like many others, sees aesthetic response as a late developing characteristic, though he acknowledges that children create work that is aesthetically pleasing, which fulfills their own needs and requirements, that they use materials thoughtfully and show both strong preferences and a set of values regarding what is to be treasured.

We see, then, a history of recognition of young children's ability to respond, at a variety of levels, to the arts. Many of the writers acknowledge qualities of

enthusiasm, spontaneity, engagement with media and pleasing use of color and form as characteristic of children's art work. The question remains whether these works of art are merely accidental productions, attributable to the 'untutored eye', or whether there is an early emerging aesthetic sensitivity which underlies and encourages these productions and, indeed, the responses of children to the arts in general.

CHAPTER II

A REVIEW OF THE LITERATURE

Careful scrutiny of the current literature reveals particular interest in the developmental nature of children's aesthetic responses and the cognitive processes underlying them. I shall review the research in three areas deemed of specific relevance to aesthetic sensitivity, namely, the child's response to style, his sensitivity to the expressive characteristics of works of art, and the issue of his aesthetic judgment and preferences.

A large body of information in this area has come from the extensive exploration into child aesthetics by Howard Gardner and his colleagues at Harvard University's "Project Zero." It should be mentioned that much of this work is based on the philosophical foundation provided by Nelson Goodman, a founder of "Project Zero," and clearly stated in his book, Languages of Art (1968, sec.ed. 1976). Goodman sees aesthetic experience as essentially cognitive, distinguished by the dominance of certain symbolic characteristics and judged by standards of cognitive efficacy. His definition of five symptoms of the aesthetic have been adopted by the researchers at "Project Zero," and are explained by Howard Gardner in his book, Art Mind and Brain (1982) as follows.

> Syntactic density, where the finest differences may constitute a difference between symbols. An example would be a drawing in which the finest, most subtle differences between two lines convey important distinctions. Semantic density where referents of symbols are distinguihsed by fine differences in certain respects. An example might be words with subtle, overlapping definitions. Relative repleteness refers to a situation in which comparatively many aspects of a symbol are significant.

Thus a graph or a diagram may not be considered replete, but a line very similar to a graph, but very simply denoting a mountain range, would be considered replete because of its many associations and "the need to attend to an indefinitely large number of aspects." Gardner continues with the definition of

> exemplification, where a symbol, whether or not it denotes, symbolizes by serving as a sample of properties that it literally possesses. For example a tune literally exemplifies speed and metaphorically represents gracefulness.

Multiple and complex reference is a fifth symptom of the aesthetic defined by Gardner as a situation in which

> the symbol performs several integrated and interacting referential functions, some direct, some mediated

> through other symbols. Rather than having a simple, unambiguous meaning which is readily accessible and which lends itself to paraphrase or translation, the symbol carries a penumbra of overlapping and difficult to separate meanings, each of which contribute to the works effects (1982, p. 60)

Explaining the application of these philosophical formulations to the study of child aesthetics Gardner notes,

> (they) enable us to avoid many theory issues upon which previous aestheticians have been impaled.....to concentrate on identifying those aspects of a symbol that contribute to its function as an artistic work. (p. 61)

It seems important to note here the significant impact that the adoption of these "symptoms of the aesthetic" have had on the research conducted at "Project Zero," and to note the definitions given them by those researchers.

Part I.

Review of research on children's discrimination of aesthetic style.

Howard Gardner and his colleagues at "Project Zero" have placed great emphasis on the child's responsiveness to style. In an early study, "The Development of Sensitivity to Painting Styles" (1970), Gardner points out the mature individual's ability to distinguish one work of art from another and to identify the artist by perceiving certain characteristics of his/her work. He notes that it has been thought that all pattern recognitions, from recognition of varied works of an artist, to recognizing or identifying car models, was "of a piece" and that classification ability remained constant across these varied contents. In this study he suggests that differing levels of responsiveness to style may allow classification of some meaningful stimuli and not of others. Thus a child who might immediately recognize car models might not respons as sensitively to stylistic features of paintings. Gardner states,

> in the present study which grew out of concern with the skills that a painter, composer, poet or connoisseur may possess, style has been viewed broadly as "selected properties of all individual or individual's works which make it discriminable from other persons'

> work or objects." Sensitivity to style, then, is the ability to make classifications and, as such, dependent on an ability to perceive certain characteristics and ignore others. (p. 516)

Gardner, then, suggests that each form of classificatory behavior may involve separate psychological mechanisms and emerge at different points in the development of the child. Thus it would seem these skills may be of varied importance in facilitating sensitivity to artistic style. In the "Development of Sensitivity to Artistic Style" (1971), musical, linguistic and graphic arts are all considered, though no particular attention is given to any link between these domains. Thus for the purposes of this review, only the graphic arts tests and results will be considered. Gardner states that in all likelihood the greatest unity of style is found within a particular art work. Thus a simple means of ascertaining whether a subject is cognizant of all the stylistic properties of a work is to expose him to one part of the work and have him select a further portion of the same work from an array. This techinque works quite well, but the presence of cues (such as half a bridge) must be considered. A more promising way, Gardner found, involved exposing subjects to instances of a particular style, for example two Picasso paintings, and then asking subjects to select another sample of that artist's work from

an array of four paintings, which could either be classified in terms of similar content, or the contents ignored and the pictures classified according to stylistic features. Gardner suggests that sensitivity to style is a "pervasive feature in human development and functioning, related to various forms of classificatory behavior . . . with sensitivity to style involving, under various circumstances, person, object and rule sensitivity" (p. 526). While specific results of this study are not noted, the article suggests a basis for Gardner's later research in the area of style sensitivity. Indeed, in a later study of sensitivity to painting styles (1970) Gardner devised "match to sample" task in which students were asked to view postcard size (4x6") reproductions of the work of a variety of artists. The standard array consisted of two works by the same artist mounted together on a sheet of paper. The test array consisted of four pictures mounted on a sheet of paper, with one of these being by the same artist represented by the two previously viewed, and the other three pictures by other artists. Subjects were asked to view the two pictures and then select the picture in the test array by the same artist. Two practice and twenty experimental stimulus sets were devised. In order to assist the subject in applying appropriate criteria, appropriate response to one of the practice sets was illustrated by the examiner and

appropriate matching techniques demonstrated as well. The study included 20 students each from first, third, sixth, and ninth grade classes, randomly drawn from a predominantly middle-class population. In this study Gardner found a significant difference in response across age groups with older students performing significantly better. He attributes this to a number of factors, among them the tendency of younger children to select a particular feature of detail as representative of style. He notes that younger students performed successfully when they were able to respond to the 'Gestalt' of the painting. Some younger subjects fixed on paintings they saw as 'striking' or unusual in some way. In general, older students realized that artists paint in characteristic ways and that certain qualities such as techinque, texture, color use, are more central for style recognition than similar subject. It is interesting to note that younger students were found to perform almost as well as older students when subject matter was not immediately apparent (as in abstracts) or was controlled (as in portraits) (p. 819).

Gardner notes that the study suggests a cluster of skills, leading to successful performance in sensitivity to painting styles, among them the ability to note modes characteristic of the artist, knowledge of artistic traditions, periods and styles, an ability to overlook the

identity of represented objects and to focus on the techniques by which they are represented. Given these results, one might question the expectation that younger students would possess classification skills of sufficient sophistication to perform well in this situation. The fact that the younger students did respond with some degree of sensitivity to the test pictures which were either "abstract" or "controlled," suggests to this reader the presence of some degree of aesthetic sensitivity. An additional point of concern is the nature of the stimulus materials. Gardner describes the examiner's presentation of the stimuli as "paintings." It would seem that this presentation put the younger subjects at a disadvantage since, unlike older children who might be expected to be aware that the uniformity of size, the absence of textural cues, etc., occurred because these were reproductions of paintings, younger children might not be fully aware of this.

In a joint study, also conducted in 1970, Howard and Judith Gardner examined the developmental aspects of sensitivity to style. They wished to examine which of the diverse aspects of a pictorial display were noticed at various ages. While previous research had focused on simple lines and patterns, on abstract stimuli or geometric forms, they sought to elicit responses to more complex pictures,

namely those produced by artists. In this study "style" was operationalized as "the capacity to recognize that certain works have common properties indicating that they were produced by the same artist" (p. 13). In a first study students were exposed to two reproductions of the work of artist A, then asked to select the picture by A from an array including single works by artist A, B, C and D. Twenty sets of simuli were assembled, employing different schools. Children of ages 6, 8, 11 and 14 were presented with these arrays. The Gardners found no significant difference in performance among the groups when picyures were either abstract (subject matter absent) or controlled (as with a group of portraits). These findings are in accord with the previously noted study. In arrays where this was possible younger students were often misled by the tendency to classify in accord with subject matter, whereas older students were able to look beyond the "what" of a painting to the "how." Questions arose as to whether children of various age and developmental stages ordinarily employ the same criteria in judging similarities and how asking students to attend to stylistic features might affect their judgment. To answer these questions sets of pictures were devised which would pit subject matter against style as classification modes. In this portion of the study 40 first graders, 40 sixth graders and 40 college sophomores were

tested. Small, postcard size, reproductions were used as stimulus materials. This time each set contained works of two different artists, one work by each, having the same subject matter. Subjects were asked, in one task, to group the most similar pictures, and in a second task to group pictures by the same artist. It was found that virtually no difference was observable among age groups when sorting grouping by subject, but great differences when sorting by artist or painting style. The younger children (6-7 year olds) continued to sort by subject while children 11 years old, and the college sophomores were able to sort by style. Interestingly, none of the groups spontaneously sorted by style. It was thus concluded by the Gardners that, while students can be influenced to sort by style, it is not a natual manner of grouping at any of the age levels considered. Why then, one might ask, assess aesthetic sensitivity on the basis of what appears to be primarily a classificatory activity?

In another study concerned with the contribution of color and texture to the detection of painting style Howard Gardner (1973), examined the effect of these properties on judgment in some detail. He noted that, since the ability to detect artistic styles involves the capacity to monitor a large number of visual cues, and then render a judgment on similarity, this test was devised to test just two of these

detection skills, the use of color and texture. In this case deletion was used as a means for assessing maturity of judgment. Since the study involved only high school age students it will be briefly noted here. Gardner found that the absence of color had little effect on a subject's detection skills, but when textural effects were deleted (using a special screening device), student responses to style were much less accurate.

In her book, Invented Worlds: The Psychology of the Arts, Ellen Winner defines "style" in the following manner,

> we mean two things when we talk about style . . . at the highest level sensitivity to style means looking at a painting and knowing that it was painted by Rembrandt or Constable. This kind of style perception is not possible for the casual spectator, and is limited to those who have developed a knowing eye through sensitivity to the arts. But there is a lower level of achievement, a level of sensitivity achievable by the typical individual. At this level perception of style means simply the ability to perceive enough properties of works to sense similarities. (p. 130)

Winner goes on to point out that young children are, indeed, capable of perceiving stylistic features, but do not think to look for them, nor know how to do so.

In two other "Project Zero" studies, related to this

subject, Silverman, et al., have explored the effect of training on the child's ability to recognize style. In the first of these studies (1975), training was carried out with a group of ten year olds. Subjects were given a pretest modeled on tests previously described, in which they were asked to match pictures from a standard array with those in the test array painted by the "target" artist. Students were also asked to draw a picture, incorporating in some way, three objects set up in an organized grouping on a table. Following the pretest, students were divided into three training groups and one control group, matched for sex, age, intelligence and motivation, as well as on baseline performance as determined by the pretest. Subjects in the training groups were seen individually for a 20-30 minute session once a week for a period of seven weeks. The control group was not seen at all during this period, nor was any training provided. Training for the different groups included intensive exposure to only two kinds of paintings, French Impressionist and 18th century Spanish. Another group received extensive exposure to a wide variety of art from various periods and by various artists. The third group of subjects were presented with a group of animal pictures, a single picture, and then an array of four pictures from which they were to choose the "closest relative" of the animal in the picture first shown them.

This approach was intended to determine whether those classification skills used in science resemble in any way those used in assessing similarities in style. In an attempt to encourage a multidimensional view, examiners were randomly assigned each week, and training focused on teaching children to ignore subject matter, on the introduction of appropriate stylistic terms and on the posing and answering of relevant questions. Finally, children were encouraged to ask and answer questions on their own and to make their own comparisons. Pilot work indicated that the most successful techniques involved children in an active process, ie. using crayons to illustrate and imitate textural effects. After training an "extensive" post-test was administered, consisting of the 20 original sets of paintings and 10 new ones, designed along parallel lines. An "intensive" post-test was similar, employing paintings of the same period, and the animal classification post-test was similar to its training counterpart. A test in which all pictures were in non-Western style and, presumably, equally unfamiliar to all the subjects, was also administered.

The results of the testing showed that students came to the study with a number of basic misconceptions about painting and the terms used to describe it. Most children in the "training groups" progressed through a series of

stages, from choices based on subject matter and a tendency to repeat the examiner's remarks, from a tendency to misuse stylistic terms and to group by common medium, to choices based on stylistic similarities, and finally to a stage in which they were able to make a multidimensional judgment, based on several relevant features. The post-test revealed that sensitivity to style is more likely to be enhanced by intensive exposure to a small set of pictures with highly distinctive style, than by exposure to and superficial familiarity with many styles. Classification skills leading to style sensitivity are related to certain discriminative capacities used in science, as was shown in the increased sensitivity recorded for the "animal classification" group. A modest change in the style of representative drawing was noted, though details of this change were not specified (pp. 373-383). The second study replicated the first (1976), and also extended the domain of the investigation to include figurative language. This study confirmed the results of the first in the art domain, the domain of figurative language does not apply to our discussion.

Throughout the studies mentioned above there seems to be little attention given to the original definition of style as a classification skill. The studies involving "animal classification" skills address the issue, but do not really clarify the relation to aesthetic considerations nor

the transfer of skills. Furthermore, the problem of task definition needs to be addressed here. It was noted by several of the examiners that the youngest subjects were capable of making stylistic judgments when they were instructed to do so and when the process was clarified for them, yet such clarification was not often provided. We have the additional finding that even older subjects did not spontaneously group by style. The effects of training also suggest the need for clarification. A second, and perhaps more important issue is whether that which is defined as primarily a classification skill is appropriately applied to the issue of aesthetic sensitivity.

A pervasive concern for this reader centers around the stimuli employed. In each case "post card size" reproductions were used and these were presented as "paintings." Especially when dealing with the younger subjects it would seem necessary to present these as "small pictures of paintings," or at least to clarify in some way that these were not actual paintings or the original work of the artist. The lack of texture, distortion of color and lack of brush strokes would seem to give the picture a uniformity which would mask stylistic differences to which children might be most responsive. As in all the studies so far reviewed the works used were all adult made and the terms employed were adultomorphic as well.

A number of other studies have addressed the question of style as one of the elements of art to which children respond differently at various ages, suggesting a traceable developmental progression. Ellen Winner (1982) cites studies which indicate that children under the age of six or seven are unable to perceive non-representational aesthetic components of a picture and that response to stylistic features does not appear before the age of fourteen. She notes however that the ability to perceive pictorial representation is partially present at birth and fully present within a few years (p. 130).

Parsons, Johnson, and Durham (1978), have explored sensitivity to stylistic properties in the following manner. Three poster size reproductions of well known paintings were presented to individual students in grades one through twelve. The subjects were asked to respond to a set of questions that yielded responses that were classified as follows; semblance (how and whether a painting refers, or what makes it a picture), subject matter, feelings (kinds and sorts of emotions influential in the aesthetic response), color (what constitutes goodness of color in a painting), artists' properties (what an artist needs to paint a good painting) and judgment (including all kinds of reasons given for an aesthetic judgment). In this section of the review I will consider only semblance and color, the

two aspects which seem to relate most directly to the question of style. Responses to questions relating to "semblance" yielded the following progression. The younger children judged the work on the basis of comprehensibiliy, things were judged to "look like they're supposed to." At the next stage there was found to be a new distinction between schematic and visual realism . . . thus what is to be represented is the visual appearance of objects, not just what we know about them. At the third stage the demand for realism was dropped except where "required" and various styles, abstractions and degrees of distortion were accepted. Noting that responses of individuals differ on many dimensions, Parsons et al conclude that the central problem is to discover these different dimensions and define those which are cognitive/developmental in nature. Since the young child is not clear about what is "specifically aesthetic" and since this distinction appears to develop over time, they feel that the kind of thing that the child finds to be relevant or irrelevant in his experience of an aesthetic object, is what changes over time (pp. 84, 85). The developing sense of relevance appears to be normative in character and has a cognitive/judgmental aspect. What develops, then, is the power of feeling relevantly, ie., in the direction of increased subtlety, complexity and responsivenes. "We think, therefore," states Parsons,

> that these defined stages are the stages of aesthetic experience as well as of judgment. Role-taking or perspective-taking is a thought that lies behind most cognitive/developmental schemes. The general notion is that children start life egocentrically, unable to take the perspective of another. Much of mental development depends on gradual acquisition and elaboration of this ability in its various forms. (p. 85)

Similar progressive steps were noted by Machotka (1966), who studied the aesthetic criteria children applied in justifying their artistic preferences. His study suggests three stages of developmental levels, which presuppose the different types of intellectual functioning found by Piaget. In the first or "preoperational stage," (ages 5 - 8), appreciation is based on subject matter and color. In the second or "concrete operational" stage (ages 7 - 11) appreciation is based on realistic representatation constrast of color and clarity of presentation. At the third stage (11 years and older) children become aware of style, ie. the hypothetical existance of several modes of representation, as well as of composition, the affective tone and luminosity (p. 884). This stage corresponds with Piaget's "formal operational stage." Machotaka's subjects ranged in age from six to twelve years. They were presented with color reproductions that varied in use of color and

style. Children were tested individually on triads of pictures and asked to tell what they liked "best" or "least," and to give reasons for their judgments. It is interesting to note that, according to his stated hypothesis, Machotka does not see style as a quality of response, appearing before adolescence. In reporting his results Machotka finds them consistent with those of Katz (1944), Stubes (1955, 1958), Lark-Horowitz (1937, 1938) as well as Mellinger (1932), Schwartz (1953) and Zavalonni and Giordani (1958). The concurrence of the recent findings with those of the early to mid-thirties highlight the fact that the discoveries in this area and concern with it, are far from new. Briefly, one might summarize the common findings in terms of the following stages. Stage 1: a preference for color and subject matter; Stage 2: a preference for photographic realism, clear representations and pleasant subjects; Stage 3: a preference for complexity and greater interest in the picture as a whole.

A study by Barry Moore (1973) describes the verbal responses of children in selected grades from one to twelve, to selected works of art. Moore's subjects, 100 students, were presented with three works, all large, poster size reproductions, including one abstract, one semi-abstract and one representational picture. They were asked to indicate their preference and to explain it. A second classification

was requested to determine the specific aspect responded to. The subjects' responses were rated according to the types of statements made. Among these were objective statements, associative statements, statements about subject matter and objects depicted, comments on the artist or historical period, and responses to specific elements, techniques or materials. The results of this study are quite consistent with those reported by Parsons, et al., and Machotka. The response of young children to "style" was rare, comprising only three of the total responses, whereas response to the objects depicted rose to 225 out of a possible 300 responses. Results reveal an increase with age in response to stylistic elements, with 32 twelfth graders responding to these elements. Concurrently, the importance of objects pictured dropped to 157 for this older group. The results of both the Moore and Machotka studies show a typical pattern occurring as children mature. Comments and assessments begin at an "objective level," with color and subject as primary interests, the middle years are characterized by the more subjective assessment of the degree of realism and accuracy, and the older child considers a number of factors including intent, mood conveyed and style (p. 28).

Thomas Carothers and Howard Gardner (1979) have considered characteristics of children's response to a

drawing task, hypothesizing that such a study would reveal stylistic aspects to which children attend. Their article, entitled "When Children's Drawings Become Art," surprisingly includes as stimulus materials only adult made art. The research explored the dimensions of line variation and the sensitivity of children to the dimension of "syntactic repleteness (see p. 6). Following Goodman (1976), they proceed from the assumption that "only those symptoms that exhibit certain characteristics qualify as works of art" (p. 571). The Gardner and Carothers study is concerned with repleteness, the property by which "all aspects of the lines in a drawing are constitutive, and expression, the property by which drawings convey feelings" (ibid.). The researchers suggest that by tracing the development of children's abilities to incorporate such aesthetic characteristics in their own work, and to perceive them in the work of others, they will be able to examine aspects of the emergence and development of aesthetic production and perception. Three tasks were administered to first, fourth and sixth grade students who were seen individually. Each task included a performance and a production component. For the production task pairs of unfinished drawings were prepared, each differing only in the contrasting use of the particular aesthetic dimension under consideration. Each unfinished drawing had a blank section on the right hand side of the

page. Children drew their completions for the unfinished picture on a blank paper, placed over this section. Subjects were asked to finish the picture "the way you think the kid who drew it would have finished it." For the perception task pairs of completions were prepared and children were asked to select the more appropriate completion. The aesthetic dimensions along which the pictures varied were brightness/shading, line variations (thick, thin), and expression (happy, sad).

Results of the production task in the Carothers and Gardner study showed that sensitivity to brightness emerged first, at first grade level, capacity to produce line variation later, at fourth grade level or older, and shading much later, with no first or fourth graders able to incorporate this dimension in their drawings. Sensitivity to expression was seen as a late-developing characteristic, with only 2 first graders demonstrating this response. By fourth grade 10 subjects produced pictures indicating an awareness of expressive qualities of the pictures, and by sixth grade all 20 subjects demonstrated this awareness. The results of the perception task indicated no significant difference across age groups in the brightness/shading task. On the line variation task there was a significant increase in effectiveness as children matured. The first graders performed at a level which could have been attributed to

chance (13 correct responses), the fourth and sixth graders scored 19 and 20 respectively, out of a total of 22 possible responses. All fourth and sixth graders performed correctly on the expression task, whereas only 7 first graders gave correct responses (pp. 576-579). The results of the expressive component will be more fully discussed in the section of the review devoted to this subject.

A number of questions are raised by this study. While the stimulus materials may have provided "inter-judge reliability," as stated, the stimulus pictures were of very poor aesthetic quality (even allowing for alterations). A second issue would be whether the addition to our correction of another's work constitutes aesthetic production in any sense of that concept. The final question which arises here is one which arises persistently in considering the "Project Zero" studies, namely, whose aesthetic judgment prevails? Are these highly complex, philosophically based, adult standards valid measures of developing aesthetic sensitivity, or do they merely serve the adult's need to outline "acceptable" responses? The consistent use of adultomorphic materials, language and standards would seem to present a significant problem when seeking to understand the aesthetic sensitivity of the young child.

Of the more than thirty studies which I have reviewed, only one utilized the work of young children in its

exploration of their aesthetic sensitivity. While this study by Hart and Goldin-Meadow (1984) does not relate specifically to the question of style it deserves mention here. The study sought to determine the means by which children judge art and, especially, whether they are capable of a "non-egocentric" critical approach. In this study 65 children, 3, 5, and 7 years of age, were asked to evaluate pictures, first according to their own preference and then considering the taste of an older and a younger person. In each case subjects were asked to give a reason for the choices made. The stimulus materials consisted of three drawings, each of a "spaceship," by children of different ages. It was found that children at all three levels chose differently when choosing for themselves, than for another person and that they could justify these differing choices. The examiners concluded that children as young as 3 could, then, function as "non-egocentric art critics" (p. 2122). Judgments measured in terms of quantity such as "it has a lot of things in it" or "he likes a lot of things," were common among 3 year olds, whereas qualitative judgments were more common among 5 and 7 year olds. The older children more frequently mentioned the "goodness" or "badness" of a picture, the artists' ability, and made references to prettiness or ugliness. All groups showed a tendency to select as "best" the picture made by the oldest child, while

they chose the one by the youngest child as "worst." Throughout the study children seemed to take the viewer's subjective frame of reference into account and to associate different criteria with different viewers. This study raises some interesting questions as to aesthetic awareness, and suggests very different results when children are asked to judge child art than when they are asked to judge adult art. It would seem that children had less accurate ideas about the value systems as related to adult art, while having quite clear ideas about art similar to their own.

In summary, studies thus far reviewed, which examined a fairly broad range of children's aesthetic responses to the elements of art, show children progressing along a predictable developmental continuum. There are consistent findings of the younger child's response to subject matter and color, to that which can be readily observed and identified. Older children consistently responded to artists' intent and to the expressive qualities of a painting, thus breaking away from an exclusive concern with subject matter. These patterns seem to be quite consistent with known patterns of cognitive development, however, a number of questions remain, many of them centered around the child's assessment of his own art work and that of his peers. If the young child can, indeed, function as a "non-egocentric art critic," as the Hart, Goldin-Meadow

study suggests, how can we best make use of this capacity and how can it be further clarified and defined?

We now turn to a review of studies on the child's sensitivity to the expressive qualities of a work of art.

Part 2.

Review of research on children's responsiveness to the expressive qualities of art

A review of the literature on the child's perception of expressive qualities in art reveals that very little attention has been given to this aspect of the child's aesthetic sensitivity. Perhaps this is due, in part, to philosophical differences and difficulties in defining this property. In an article entitled "The Problem of 'Expression' in Art and Art Education" (1970), Henry Raleigh indicates the difficulty of defining this property, pointing out the varied interpretations and views which philosophers and students of art have brought to this question. Indeed, such noted philosophers and aestheticians as Gombrich, Arnheim, Dewey and Goodman present a variety of perceptions regarding expression. Dewey (1934) says of expression,

> not all outgoing activity is of the nature of expression, while there is no expression unless there is an urge from within outward. An activity which was "natural," spontaneous and unintended is transformed because it is undertaken as a means to a consciously entertained consequence. Such transformation marks every work of art. (p. 61)

Rudolph Arnheim, in an article titled "From Function to Expression" (1964), states, "expression can be described as

the primary content of vision . . . it is an objective property of all organized patterns of shape and color" (p. 23). In his book, Toward a Psychology of Art (1966) he notes,

> expression is an inherent aspect of every perceptual quality, whether of size, shape, movement, illumination, etc. It is found in every percept of every object or activity, human or non-human, animate or inanimate, useless or useful, man-made or natural, in fine art or applied art. (p. 200, 201)

The art historian, Ernest Gombrich (1960) suggests that expression is a kind of "game playing in the communicative media" (p. 385). Nelson Goodman (1968) defines expression as "'metaphorical exemplification,' thus the aesthetic properties are those conveyed, but not literally represented" (p. 226). The purpose of our review is not to engage in a philosophical discussion or definition, but to suggest that the paucity of available materials may well be due to the absence of a clear definition or agreement regarding the aesthetic quality and characteristics of art in general. For the purpose of this review and since so many of the current studies seem to be based on his work, "expression" will be defined in terms suggested by Nelson Goodman and adopted by Ellen Winner (1982), namely, "those aspects of a work of art which are

conveyed without being literally possessed."

According to Winner non-visual sensory properties can be expressed by means of the elements of a picture and their rendering. "Pictures can express non-visual sensory properties by means of color and line . . . such as heat, noise, quiet, as well as psychological states such as sadness, gaiety or anxiety" (p. 123). Winner asks, "must the ability to perceive what a picture expresses be learned through exposure to pictures, or is it, like object recognition, present at birth?" (p. 123) She cites studies which have examined children's abilities to appreciate the expressiveness of simple, abstract stimuli such as colors and lines, and others which have investigated whether children can perceive expression in actual works of art. These studies have yielded quite different results. Let us now turn to a review of several studies that have addressed the question of the child's ability to perceive and appreciate expressive qualities in works of art, whether these works be abstract or representational.

In one such study (Gardner, 1974), subjects age 3 to adulthood were asked to match non-verbal stimuli, color swatches, lines drawn on paper, with sets of polar adjectives such as loud/soft, soft/hard, etc. While younger children did not make associations easily between these sets of stimuli, children 7 and above could perform the task

successfully, without, however, being able to provide verbal justifications for their choices. By age 11 children responded as successfully as adults, applying polar adjectives to the sensory domains. These older subjects could verbally explain the feeling that a straight or jagged line might be "hard," whereas a curved line might be described as "soft." It is interesting to note that while Gardner did not feel pre-schoolers performed well on the task, they were able to find a "soft" line or a "happy" color, when asked to do so. Thus it would seem that, when given a forced choice or a well-defined task, younger children did show sensitivity to the stimuli (p. 123). This seems to suggest at least rudimentary, innate sensitivity along these lines and, indeed, support for this view can be found in studies conducted with infants. It seems unlikely that children, even in the upper range of this study, would spontaneously consider the connection between verbal and non-verbal stimuli. Questions then arise in relation to prior training, and especially in regard to task definition. Ellen Winner cites a study (Wagner, Winner, Cicceti, Gardner, 1981), that shows that infants as young as 6 months can perceive the similarity between auditory and visual stimuli, such as a dotted line and a pulsing one; or a straight line and continuous one. For example, infants were found to prefer looking at a dotted line when a

plusating tone was presented but shifted their attention to a straight line when the tone became continuous (p. 124). Assessing the results of this study as well as one by Lefkowitz and Turkewitz (1981), showing that intersenory interaction existed in newborns and that they attend to quantitative variations in stimuation (p. 828), leads Winner to conclude that rudimentary, non-reflective responses to expressive qualities may be present at birth (1982, p. 124).

In a study designed to probe more deeply into children's ability to respond to the expressive qualities of works of art, Blank, Massey, Gardner and Winner (1981), examined children's responses to various mood states depicted in a painting. In line with Winner's previously stated orientation "expressive characteristics" were defined, in Nelson Goodman's terms, as those characteristics metaphorically, rather than literally, expressed. To quote the authors directly, "this step beyond the literal to the expressive results in the object functioning aesthetically" (1981, p. 1). The work of art may possess properties "not literally possessed" by means of representation, texture, color or linear quality. Abstract art, though non-representational, is considered expressive. To respond to a work of art aesthetically, then, would require the ability to recognize similar mental or physical attributes, though drawn from different domains of experience. This

study sought to explore the responses of children 5, 6, 8 and 10 years old to the expressive qualities of reproductions of abstract paintings. The tasks were carefully constructed to eliminate the possibility that children could succeed merely by attending to content that was literally conveyed. Various aspects of ability to perceive expressive qualities were explored, including mood dimensions, for example, happy/sad, excited/calm; constancy of other salient features and finally, style differences. Children were asked not only to respond to the stimulus pictures, but to explain their choices. The stimuli were sets of colored slides that included pictures with contrasting mood and styles. Both sharp and subtle contrasts were presented. Children were engaged in conversation which helped them clarify the ways in which moods and feelings might be expressed in works of art. A second study involved showing the subjects a photograph which depicted a particular mood, and asking them, to "match" the mood of the photograph with one of two slides presented simultaneously. The results of this study indicate that even the pre-schoolers (5 year olds) perceive the expressive qualities of paintings and in most instances, describe the mood expressed in terms similar to those used by artists. When the pairs of slides represented stylistic similarities children tended to base their selections on

style rather than mood, however, in the case of markedly different style pairs, correct responses to mood prevailed. These findings would suggest that style overrides mood. We see in this study, then, a suggestion that young children do express an early-emerging awareness of the aesthetic qualities which are of an affective nature. The study suggests, as well, that we take a closer look at children's responsive capacities. It would seem that the fact that children were consistently found to be responsive to expressive characteristics, though not employing adult terms or engaging in clear explanations for their responses, indicates a need for further exploration of the child's mode of expression and his "vocabulary of a response."

A previously cited study by Thomas Carothers and Howard Gardner (1979) proposed to study children's drawings to determine the point at which these drawings "become art." Two tests were administered, one to measure sensitivity to dimensions of "syntactic repleteness" (after Goodman, 1968), and the other to measure sensitivity to the expressive qualities of the work. The results of the "repleteness" study have been addressed in the previous section, and only findings concerning the expressive qualities will be noted here. The examiners decided against the idea of using the children's own art work for this study, fearing that its use would destroy "inter-judge reliability." They defined

expression as "the property by which drawings convey moods, feelings, or ideas." The subjects were tested on their capacity to perceive and produce expressiveness along a happy/sad dimension. The participants were elementary school children, 7, 10 and 12 years old. The study comprised two tasks, the production task, which consisted of pairs of unfinished drawings, differing in mood or feeling; each had a blank space on the right on which children were to draw a completion for the picture, using a blank overlay. The intent was to have children complete the drawing, employing the appropriate expressive mode. For example, one picture might require the addition of a tree and a flower; if the picture was "sad" a drooping tree and a fading flower would be considered an appropriate completion. The second task used the same pictures, but provided children with two possible completions, from which they were to choose the more appropriate one.

Findings from this portion of the Carothers-Gardner study indicated that sensitivity to expressive qualities developed along a continuum. Absent in 7 year olds, it developed significantly with age. Viewed in relation to other studies the Carothers-Gardner material opens the possibility, as they note, that "children might possess an aesthetic sensitivvity to which the adult observer is completely blind" (p. 579). As previously noted, this

reader is concerned not only with the unaesthetic nature of the stimulus materials, but also about the young child's reluctance to complete a picture not his own, and the artificiality of the situation.

The few published studies available for review suggest a need for further exploration of the problem of children's response to expressive characteristics. The philosophical disagreements, which have been mentioned earlier, provide further impetus for the developmental study of this characteristic of aesthetic response. Few studies have addressed responsiveness of children to the expressive characteristics of adult work and none have been found which explore the child's awareness of this characteristic in his own work or that of his peers. The persistent use of adultomorphic terms, art work and aesthetic standards proves a continuing problem. Those who have explored the issue of expressiveness and the child's response to it, seem to agree that there is considerable evidence to support the idea that this is a nascent characteristic, which progresses from a rudimentary level of infant response to the experienced and appropriate response of the adult. Questions remain as to the effect of intervention or instruction, the degree to which this sensitivity develops spontaneously and the specific developmental levels which might be identifiable. The issue raised by Carothers and Gardner is a vital one,

namely, whether an aesthetic sensitivity is inherent in some of the children's responses, which is not easily tapped in the studies reported so far. The question also remains whether the definition of "expressiveness" as "metaphorical exemplification" is adequate to understand child art and children's aesthetic responses to this aspect.

Part 3

Review of research on children's aesthetic preferences and their significance as indicators of aesthetic sensitivity.

The question of the aesthetic preferences of children, and their basis in emerging aesthetic sensitivity or awareness has been addressed by a number of recent studies. Parsons, Johnson and Durham (1978) traced the developmental stages in children's aesthetic responses, seeking a basis for the differential responses of children along a cognitive/developmental continuum. In tracing these stages, Parsons, et al., revealed a pattern of visual preferences which is in agreement with studies more directly addressing the question of preference. They note that, "what changes is the type of thing which the child finds relevant or irrelevant in his experience of an aesthetic object as such" (1978, p. 84). They find a developing sense of relevance to be "essentially normative" in character. In the Parsons study he and his colleagues identified six topics, each having observable developmental levels. Topics were identified as "coherent units of discussion on which students were able to offer opinions and reasons for them: (p. 87). Semblance, the first topic, was intended to cover the range of possible views concerning how and whether a painting refers, or "what makes it a picture?" A second

topic was subject matter, which included all views of the kind of subject matter acceptable in a painting. Subject matter was defined a that which is "referred to or pictured." Feeling, the third topic, identified as its key question, the kinds and sources of emotions influential in the aesthetic response. The fourth topic was color, this topic examined what aspects of a color made it pleasing. Parsons notes that children found this the most intelligible and easily answered question. Artists' properties, the fifth topic, referred to the child's view of what it takes to be a good artist. The last topic, judgment, included all kinds of reasons offered for aesthetic judgments. Parsons' subjects ranged in age from first graders to twelfth graders. Subjects were individually engaged in conversation regarding three poster-size reproductions of well known paintings. Klee's "Head of Man," Picasso's "Weeping Woman," and Renoir's "Girl and Dog" were used for the younger children (up to sixth grade). Older children responded to Bellows' "Demsey and Firpo," Picasso's "Guernica" and Chagall's "Circus."

Within the six identified topics distinct developmental stages were found, reflecting both changing sensitivity and changing preferences. These stages will be outlined here, since they shed some light on the question of preference. In the first stage of the "semblance" topic,

Parsons found that the major concern was representation, things looked as they were "supposed to," or were described as looking "real." Parsons termed this "schematic realism." At the next stage, precise expectation led to what he termed "photographic realism." In the third stage children's reactions to the pictures indicated that they had dropped the need for realism, and that there was increased awareness and tolerance of a variety of painting styles, as well as awareness of the intent of the artist and the response of the viewer. Questioning about subject matter also revealed three distinct stages. In the first, children felt paintings should be about pleasant subjects, that topics should be interesting and "customary." In the second stage there was more explicit appeal to what people like and dislike and the range of subject matter considered suitable was greatly expanded. The final stage was marked by acceptance of any subject matter, as well as by a freedom from moral judgments. The first stage under the topic "feelings" was characterized by focus on characters and the feelings attributed to them. Children at the next stage became able to distinguish between their own feelings and those expressed in a painting, and in the third stage, generalization beyond the feelings of individual characters led to an assessment of the emotional impact of the painting as a whole.

While "color" was the topic that evoked the easiest responses, younger children did not individuate colors well. They responded to color with delight, and preferred bright colors to dull ones and bold and varied colors to black and white. The second stage of response showed a relationship to the desire, at this stage, for photographic realism, colors were seen as "good" if they were appropriate to the subject matter represented. At the third stage a fuller sense of the appropriateness of color emerged, and intent and theme were considered as well. Questions regarding "artist's properties" revealed that, at first, children thought only in terms of materials needed to make a picture. At the second stage, attributes of the artist became important, as well, and the third stage found both cognitive and affective qualities identified as necessary. Judgment, the last topic considered, revealed children's criteria for judging a painting "good" or "not good." Parsons found that, at the first stage, preference was the basis of judgment. At the second stage effort, manual skill and degree of realism achieved, formed the criteria. A third and fourth stage found increasing awareness of the importance of expressive qualities, and a consideration of the artist's intent, the beholder's response and the genre of style to which the painting belongs (pp. 87-104). The developmental levels identified in this study seem

consistent with a number of other studies, as our review will reveal.

Machotka (1966), analyzed aesthetic criteria by means of which children evaluated paintings, and the means by which they justified their preferences. In this study the subjects were upper-middle class French schoolboys, ranging in age from 6 to 12 years, with a group of 18 year olds used as a control. Stimulus materials consisted of a total of fifteen 8 1/2 x 11" color reproductions of paintings, representing a wide, but incomplete choice of color use, content, and style and all representing the Western tradition. Students were presented with sets of three paintings, and individually interviewed as to the painting best liked, least liked, and the reasons for their choices. Analysis of the responses was made on the "response to content" (including subject matter, affective tone or other elements), realistic representation, clarity, color, contrast, harmony, luminosity and style. According to Machotka, his findings support "three developmental levels, which presuppose the different kinds of intellectual functioning found by Piaget" (p. 887). He identifies these as, a pre-operational level (ages 5-8), at which the child makes his selection on the basis of subject matter and color; the concrete operational (ages 7-11), characterized by the desire for realistic representational work, as well

as for color and clarity. A final stage, the formal-operational (age 12 on) is charactrized by response to style, composition, affective tone and luminosity. These studies, and findings relative to them are quite consistent with those of earlier studies, for example, those by Katz (1944), Mellinger (1932), and Subes (1955, 1958), who examined children's preference among paintings. Similar studies by Lark-Horowitz (1937, 1938), Lascaris (1928), Swartz (1953) and Zavallioni and Giordani (1958), concur with Machotka's findings, suggesting that young children's preferences are determined by subject matter and color, while older children prefer realistic representation and come, only gradually, to attend to the more "formal" aspects of a painting such as light, harmony and contrast. Machotka sees a correspondence between the child's developing preferences and his criteria for judgment. As with other studies based on the Piagetian model, the question might be raised as to the relative fixedness of these age-related stages. The age at which children enter these stages might well be affected by such issues a training, exposure to art work, opportunity to use materials, etc. However, we recognize that preferences are not merely the result of enculturation, as studies of infant preferences demonstrate. For example, studies by Bornstein (1975) indicate that given an opportunity to gaze at a focal color such as red, or a

peripheral color like magenta, infants will consistently attend to the focal color (Winner 1982, p. 225). Fantz and Miranda (1975) found that infants, given a choice of a straight or curved contour, consistently selected the curved one as the focus of their attention (p. 225). As the child matures, it is possible that some of these preferences, noted in infancy, while not disappearing, may be subsumed under the child's response to other characteristics. Degree of novelty of the visual stimulus is also a significant determinant of preference, as Bradbury (1974) has established. Bradbury worked with groups of students in grades K, 4 and 8, using a six-pair choice paradigm to what he refers to as the "transitive quality of preference (p. 79) . Students, interviewed individually, were presented with a six-page book containing a variety of color samples, presented in various combinations. The three-pair choice sequence allowed several response patterns; first pair xy, second xz, third yz, with xyz presenting a balanced presentation. Subjects were asked to select their favorite color in each set. It was predicted that younger children would respond to a new color (the novelty), rather than consistently choosing the same color as their favorite. It was found that "contextual influences which are conducive to the more prevalent of the intrasitive choices are also responsible for the repetition of that especially

inconsistent response shown most frequently by young children. A high degree of consistency in inconsistent preferences, attributable to novelty, is thus demonstrated" (p. 79).

On the assumption that the nature of the child's judgment reveals his understanding of art and his attraction to it, Barry Moore analyzed children's statements about art as follows: Objective (facts or purported facts), associative (personal reminiscence), theme, objects depicted, artist and historical period, specific elements and techniques, and materials. Subjects for his 1975 study were 6-18 year olds, who were presented with poster size reproductions of well known paintings. Moore questioned the children individually as to their preferences and the reasons for them. Questions asked were, "tell me what you see . . . do you see anything other than objects?"; "which one do you like best? why?" Sets of pictures included reproductions of Cezanne's "Pommes et Oranges"; Picasso's "Three Musicians" and Manessier's "Night" and two additional sets of similarly varied pictures.

Moore found that children at various ages did, indeed, attend to different aspects of the paintings, and often justified their preferences according to the aspects they perceived. Younger children were found to make more objective comments, relating to subject and color, and older

students to attend more to the total painting, its mood, the artists' intent and the period. Moore found that semi-abstract pictures, such as "Three Musicians," elicited fewer character expression and subjective comments than did representative art, which elicited associative comment and frequent character expressive comments (p. 27).

Ellen Winner, in her book Invented Worlds" The Psychology of the Arts (1982), refers to the value-laden nature of aesthetic response and notes that our judgment is restricted to "what we attend to." She feels that since children are likely to overlook aspects of style on the basis of the more obvious properties of a painting, such as color and subject matter. Her opinion is supported by Child, whose 1964 study she quotes. Child tested children from 6 to 17 years old. Subjects were seen in groups, and shown pairs of pictures, with each pair being similar in style and subject matter, but with one picture having been judged aesthetically superior by at least twelve of fourteen judges familiar with the arts. Child found that children in the 6-11 age group chose the picture preferred by the judges only 35% of the time. Agreement rose to 45% at age 12 and peaked at 50% around age 18. The study would seem to suggest that, while a correspondence with informed opinion increases with age, even the older subjects showed marked discrepancies. This would give strong support to the effect

of training on performance in such tasks. In 1964 and 1965 studies by Child indicated that education does make a difference in aesthetic preferences. While these subjects were all college students, the results may prove useful to our discussion nonetheless. Child found that, when students were exposed to pairs of pictures of differing artistic merit, and given feedback on what was considered best by experts, their responses began to accord more with those of the connoiseurs (cit. Winner, p. 134, 135).

Many of the studies so far, imply or state a high degree of egocentrism, especially among young children. This is especially so of those studies based on a Piagetian framework. The issue of egocentrism and its effects on preference, is addressed by Hart and Goldin-Meadow (1984). Noting that, in previous research, investigators had questioned subjects as to their preference for adult work, they contend that children were expected to respond to an adult standard and to choose pictures which an art critic or other specified adult might like, thus consitituting an unfamiliar task for the child. Their study, conducted with 3, 5 and 7 year olds, used as stimulus materials, the drawings of other children, of similar ages. All drawings were of "a spaceship" and were drawn with felt-tipped markers on 8 1/2 x 11" paper. Children were interviewed individually and asked which drawing they liked most and

which least, and asked to give reasons for their preference. They were then asked to tell which picture they thought their mother or father might like best/least, and to give reasons for choices. Finally they were asked to repeat the procedure for a younger sibiling or friend.

Hart-Goldin-Meadow analyzed the response in terms of six categories, namely, quantity, size, color, quality, surface aspects (design, shapes, texture, shading), subject matter, and finally personal taste or experience. Results of the analysis showed that each age group most often chose as "best" the picture drawn by the oldest child, and as "worst," the picture by the youngest child. In choosing their own favorite pictures the 3 year old most often mentioned quantity as the reason for the choice ("it has a lot of things in it, I like a lot of things"). Children in the 5 and 7 year old group based their judgments on quality. At each age level they found that children chose very differently for others than for themselves, and were consistently able to give reasons for their choices. While concluding that findings are consistent with other studies, in that children often judge by subject matter, personal preferences and detail, Hart and Goldin-Meadow state that even very young children are able to function as "non-egocentric art critics." Children proved able to set aside their own preferencs and notice properties to which

another person would be likely to respond. They note, also, a high degree of accuracy in these judgments, and suggest that there may be a degree of aesthetic sensitivity indicated by these results far beyond that which we have previously associated with young children (p. 2128). Golomb reports on another study by Wandre-Sanel (1982), which addresses the child's preference for drawing systems, which is also a question of complexity. Wandre-Sanel examined form complexity as a function of the number of representational principles included in a drawing. A street scene, consisting of a house, garage, car, trees and flowers, was varied from a predominantly frontal presentation that avoided overlap, to presentations that included form overlap and partial occlusion of objects, decreasing object sizes, and a single vanishing point to suggest spatial depth. A set of three drawings, varying in level of complexity was presented to the subjects 4-9 years old. Before presentation of these sets of pictures children were asked to draw a picture, including the elements mentioned above. It is noted by the examiner that even the simplest stimulus drawings exceeded the drawings produced by the youngest children, who preformed on the drawing test at a level below that of the complexity of stimulus pictures, insisted that they liked all three drawings in the set, or at least, two of the three, equally well. Such multiple

choices were common with 4 year olds, and began to decline with 5 year olds. Older children, whose pictures more closely resembled the stimulus pictures, showed a clear preference for drawings more complex than their own. While none of the children used perspective cues in their own drawings, the picture that displayed multiple overlap, diminishing sizes and a single vanishing point, was, from the age of 5, frequently selected as the best liked (pp. 74, 75).

The study by Wandre-Sanel showed that the youngest children failed to make a distinctive selection, and that most children preferred a drawing above the level which they were capable of producing. No child performed at the highest level, even though from age 6 on this was the most preferred picture. Despite the choice of the most complex representations, hardly any child could explain the differences in representational style, suggesting only limited understanding of pictorial devices. The data collected in this study show clearly that the child's criteria for drawing and for making a selection among ready-made pictures differ radically (pp. 75, 76).

In further examination of the question of preference, Golomb (1983) investigated the figural preferences of young children. She questions whether these preferences would be consistent with their own drawing schema. The first study

varied location and orientation of arms, in a simply drawn figure of a girl, and compared children's own drawings and completions with their perferences. Results showed that most preschoolers drew figures with horizontal arms and completed figures similarly. When presented with completed pre-drawn figures, however, children overwhelmingly preferred arms drawn diagonally. Children were next presented with drawings that varied line overlap. The drawings consisted of a little girl a) with arms outstretched, b) with one arm bent, c) with two arms intersecting the figure and, d) with a figure that included additional overlapping lines in a collar and apron. It should be noted that children presented with these drawings had avoided overlap in their own drawings, and had employed a principle of greatest contrast of lines as exemplified by the figure with outstretched arms. In this study, however, children, without exception, chose drawings which employ overlap, suggesting that their idea of what is best, prettiest or most appealing, does not correspond with the simplicity of their own drawing systems (p. 74, 75). These studies, in employing both perception and production tasks, and the use of simplified drawings, rather than adult art, provide valuable insight into the question of preference, and clearly indicate that what a child can and does respond to aesthetically, and what he can produce are two very

different things.

From the studies thus far conducted, children's aesthetic preferences would appear to be quite predictable in nature, and definable, in large measure, in a cognitive/developmental framework. The studies reviewed, while divergent in approach and intent, show a considerable degree of agreement in results. In this area of child aesthetics, more than in either of the others considered, consistent patterns can be identified. Concerns remain, however, over the framework in which many of these studies were conducted. The predominance of adult art used as stimulus materials, and the persistent use of adultmorphic terms in both the questioning of the subjects and the evaluation of their responses, indicates an attempt to measure children's aesthetic sensitivity against adult aesthetic standards. The nature of many of the stimulus materials is of concern as well, with many of them being small reproductions, presented as "paintings," but lacking the true color and texture of paintings.

In light of the above stated analysis, I wish to address the following issues: (a) the early indications or manifestations of aesthetic sensitivity in children's approach to drawing and painting, with specific emphasis on their own work and that of their peers. In this context I will explore the extent to which children possess a unique

"language of art" that expresses itself in choice of media and compositional style as well as subject matter. Furthermore, children's verbal and expressive behavior in response to the visual media needs clarification. And (b) to explore similarities and differences in children's aesthetic responses to their own work and that of others, i.e., their responses to the production of drawings and paintings and their perception of finished works. Given these concerns these issues were addessed in two empirical studies. The first study examined the child's rationale for making a choice among various media, and the extent to which preference is related to compositional style and subject matter. The second study considered children's judgments of drawings and paintings by unknown peers, and assessed their sensitivity to figural differentiation, detail, color and compositional style.

C H A P T E R I I I

STUDY 1

Methods.

This study is designed to elicit children's responses to their own art work, to determine whether there is evidence of emerging sensitivity to the aesthetic aspects of their work, and to examine the means by which children express their judgments. The basic data consists of a collection of spontaneous art productions of kindergarten children, executed in a variety of media such as paint, crayon, chalk and felt-tipped marker. An essential aspect of this design includes an extensive inquiry of the child's attitude toward his work, and the classification of the work as representational or non-representational. Next, subjects are asked to complete a picture in the non-preferred mode (representational or non-representational) i.e., the mode not spontaneously selected, and asked the same questions about the picture.

Subjects

The subjects for this study were 30 public school kindergarten children, ages 4.10 - 6.4, enrolled in a half-day session. The children came from middle-class homes

and were heterogeneously grouped as to ability and intelligence. The group of subjects included 16 girls and 14 boys.

Materials

Materials provided included white construction paper, with 9 x 12" paper provided with both paints and crayons. Tempra paints were provided, both at easels and on a large table (36 x 72"). Brushes used at the easel were large, while small "water color" brushes were provided at the table. Six colors, always including the three primary colors, were provided at the easels, additional colors included black, white or mixed colors such as magenta or turquoise. At the table a wider range of colors was available, with 10 colors regularly available. Crayons included 28 colors and small (fine) marker sets included 32 colors. Broad tipped markers were boxed in sets of 8.

It should be noted that in one of the groups small brushes were not regularly available and that crayons, while always available, were placed on a table with mimeographed pictures to "color in," as well as white construction paper.

Tasks and Procedures

1. The examiner noted the spontaneous choice of art activity and media during an "activity period" when children were free to choose art activities, blocks, books, puppets,

dramatic play, puzzles, manipulatives or a story-telling center.

2. The examiner asked the following questions of the subject, upon completion of the spontaneous art work:

1. Was it fun to make?
2. What do you like best about your picture?
   a) What do you like best about the paints and brushes you used?
   b) What do you like best about the markers or crayons?
3. Is there something special about:
   a) The colors you used?
   b) The shapes you used?
4. Can a picture tell you something about feelings?
   a) Does the picture do that?
5. Why do you like it better sometimes to paint a design?
   a) Why do you like it better to paint (or make) pictures of "real" things?
6. Is there anything you'd like to change?
   a) Could you tell me that it is?
   b) Is there anything you could do to make it better?
7. Please give your picture a name.

8. Would you like to make another picture?

a) Would you like to use the same materials, or different ones?

3. The examiner then asked the subject to complete a picture in the medium and mode not spontaneously selected, i.e., if a non-representational painting had been made, the subject would be asked to make a picture with markers or crayon, in a representational mode. Following the completion of this picture the same questions were asked.

The complete protocol for each subject comprises the answers to the standardized set of questions and the examiner's description of the setting at the time of picture production. In addition the examiner records the number of spontaneous paintings, crayon or marker pictures executed during the period of observation (usually 45 minutes). Also, where this is possible and easily noted, individual preference, colors available from which to choose and any evidence of degree of involvement with the work, such as a smile, a comment, or evidence of pleasure in motion, sensation, etc.

Results

Analysis of the data reveals an interesting contrast between children's use of the media in terms of representational versus non-representational work, degree of

involvement with the production and their perception of representational and non-representational modes. Since the presentation of materials for painting and drawing, and opportunities to use these materials occurred in an unstructured setting, children's choice of a particular medium requires special attention. Our protocol material provides us with information about the number of spontaneous design paintings, individual preference for materials and for representational versus non-representational work, choice of color and evidence of involvement in work, as indicated by a smile, comment, apparent pleasure in movement or in the sensation of using the medium.

With one exception, children showed a marked preference for paints and brushes over markers and crayons, especially for non-representational work. In the group which had frequent access to small brushes as well as large ones, at each easel, a total of 31 paintings were produced, 24 of them indicating the use of small brushes and only 7 the larger brushes. The second group had a choice between easels and large brushes and large and small colored markers. Crayons were also available to this group, but were placed on a table with mimeographed sheets to color. This group, too, showed a marked preference for paint, with 17 out of 18 children choosing this medium spontaneously (see Table 1).

Table 1

Frequency Distribution of Representational and Non-Representational Art in Different Media

Type of Product	Easel/Table Painting		
	paint large brushes	paint small brushes	Total
Representational	5	8	13
Non-Representational	23	21	44
Total	28	29	57

Type of Product	Markers/Crayons				
	markers large	markers small	crayon	other	Total
Representational	16	8	5	3	32
Non-Representational	0	0	0	3	3
Total	16	8	5	6	35

Note: While one group of 12 had regular access to small brushes the group of 18 did not have such access.

Both groups used crayons and markers almost exclusively for making "real" i.e., representational pictures. Of a total of 55 pictures for which these materials were used, only 3 could be considered non-representational. One child made three pictures using a ballpoint pen, comprised entirely of lines "fast and tight lines," as he described them. Linear elements were more controlled when crayons and markers were used, with such pictures containing many curved; smooth,

broad and thin lines, indicating greater control of the medium. Few curved lines appeared in painting productions, and only 19 out of 67 paintings (28.5%) included these, in contrast to 48 (80%) of the crayon or marker pictures (see Table 2).

When painting, children showed a marked tendency to use all the colors and this was true whether they worked at the table or at the easel. Though the number of colors available was not systematically recorded, there were at least five colors available at the easels and ten at the table with smaller brushes. While sets of crayons included from 24-28 colors children seldom used more than seven or eight colors in a single production, and often used a single color. Marker sets included 8 colors in the wide markers and from 8 to as many as 32 in the narrow marker sets. No mixing of colors was noted in use of crayons or markers, though the technique was familiar to the children and was frequently used with paints (see Table 3). Another interesting finding was in response to the question "Would you like to do another picture (employing the same medium)?" While children who had just completed a painting chose to do another 75% of the time, those who had used crayons or markers chose to do so only 5% of the time (see Table 4 -- responses to questions).

Table 2

Quality of Linear Elements in Drawing and Painting

Linear Elements	paint large brushes	paint small brushes	Total	markers large	markers small	crayons	other	Total
curved	11	8	19	20	12	18	3	48
straight	18	12	30	21	7	5	0	32
jagged	2	1	3	0	2	0	3	5
smooth	15	10	25	22	18	10	3	5
continuous	25	15	40	17	7	5	3	43
discontinuous	0	0	0	0	0	0	0	0
varied	1	2	3	0	0	1	1	2
uniform	17	15	32	27	15	15	0	57
broad	27	15	42	25	5	5	0	35
thin	0	0	0	0	0	2	2	4

Table 3

Media and Action: The Effects of Implements on the Production Process

Implements Used	Action/Process					
	mixing	planned placement	unplanned placement	experiment -ation	realism	% of colors used from those avail- able
Paints Large Brushes	20	8	17	20	6	99%
Paints Small Brushes	20	12	8	20	6	100%
Markers Large	0	18	2	0	20	80%
Markers Small	0	15	0	0	15	65%
Crayons	0	7	0	0	5	33%
Other	1	4	1	0	3	50%

Table 4

Analysis of Children's Responses to Questions Concerning Their Work

Media	Questions and Responses											
	# 1		# 2		# 3		# 4		# 5		# 6	
	Yes	No	Yes	No	Yes	No	Yes	No	R	NR	P	C/M
Paint Large Brushes	20	0	20	0	5	15	2	18	3	17	13	2
Paint Small Brushes	3	0	3	0	3	0	0	3	0	3	3	0
Markers Large	16	0	16	0	0	16	1	15	16	0	18	2
Markers Small	3	0	3	0	0	3	0	3	3	0	3	1
Crayons	1	0	1	0	1	0	0	1	1	0	0	1
Type												
Representational	19	1	14	5	1	19	2	18				
Non-Representational	22	0	22	0	17	5	0	22				

QUESTIONS

1. Do you like it?

2. Was it fun to do?

3. Would you like to make another?

4. Is there anything you'd change?

5. What is most fun, representational (R) or non-representational (NR)?

6. Which media is more fun? [Paints (P) or Crayon/Marker (C/M)]

The children's degree of involvement with their work was quite different in the two types of media. Among other indications this was reflected in time spent on productions (see Table 5). While children were enthusiastic about using paint, 38 children out of a possible 46 finished their paintings in three minutes or less. When using markers, crayons or cra-pas 25 out of 52 spent from three to five minutes on their work, while only 28 finished in a shorter time.

Table 5

Media Use and Production Time

Media	# of Productions	Minutes Spent on Production				
		1-3	3-5	5-10	10-15	more than 15
Paint Large Brushes	26	24	2	0	0	0
Paint Small Brushes	20	14	6	0	0	0
Markers Large	27	14	13	0	0	0
Markers Small	15	4	12	0	0	0
Crayons	7	1	6	0	0	0
Other	3	0	0	0	2	1

While there were many expressions of delight and pleasure in using the paints, only one child expressed

similar feelings about the use of crayons and markers, and this was pleasure in the intensity of color he had obtained. An example that indicates that such feelings as delight and pleasure can be observed and correctly assessed, can be seen in the behavior of a little girl, Amy. While painting at the easel, she rocked back and forth on her toes, singing at the top of her lungs. As the teacher passed by she looked and exclaimed, "Can't you tell, I just love to experiment with these colors!" Other expressions of involvement and contentment can be seen in Peter's comments about his "fast and tight lines" as well as in the frequent comments children made as they mixed colors. Their remarks, as well as their attentiveness to their work, indicate an awareness of such elements as line, form and color, an appreciation of these elements and a degree of control these children felt over them. Many paintings, especially those employing many colors, while obviously experimental in nature, elicited distinct judgments upon completion. "Oh, look! I made a peach color, right there in the middle." "Oh, aren't those colors beautiful! I love the way they all go together--I really love that!" "Look, look at that, the colors just sort of got all new!" There were also negative reactions, "Don't you just hate brown!," or "Oh yuck, I shouldn't have mixed those all together, now it's all yucky!" and "Oh gross! It's all black or brown or something!"

In response to questions about their work, children usually expressed satisfaction, regardless of the medium employed. In only two instances was dissatisfaction expressed, and in both this was attributable to "overmixing" the paints, producing a brownish mess! The idea of changing something seemed almost unacceptable, and there were several very surprised responses to this question, both in the first group, asked, "Is there anything you'd like to change?" and in the second group in which a revised question was asked, namely, "Is there anything you could do to make it better?" Of the entire group of 30 children only 5 suggested that they might add something to a representational drawing, and 8 suggested changes to their paintings, usually in terms of fixing a drippy area, or eliminating a color they did not like.

The question, "What do you like . . . ?" evoked varied responses. Most children, as noted, liked their work and the medium used for that purpose. In other words if the work was representational children expressed pleasure in the fact that it "looked like" what they wanted to portray. The comment was often made that crayon and marker are "gooder for real pictures." Similar responses were noted in the question, "What do you like about the shapes you used?" i.e., in representational work they liked things because they looked "real." Significantly, children did not seem to

make the same requirements of color. Even with crayons and markers colors were used on the basis of preference . . . "I like it, that's all." There was no particular enthusiasm shown for color in responses to markers or crayons, a striking difference from the enthusiastic response when the medium was paint. In painting, shape became unimportant, in fact often the question was not really answered. Children responded with statements such as, "well the shapes just sort of go together" or "they make a new color where they touch."

Almost all responses in regard to preference for materials were in "Kinesthetic" terms. Paint was chosen because it was "smooth" or "slippery" or all "Mix-y." Pen, marker and crayon were enjoyed because they made "good, fast and tight lines," or "they went where I wanted a line." When asked which media they liked most to use, there was a striking correlation between the media chosen and the type of picture the child wished to make. Of the 30 children questioned, 26 stated that paint was better for non-representational work and an equal number preferred marker or crayon for representational work (Tables 1 and 4). When asked which kind of picture was more fun to make 28 children chose paint and only 2 markers or crayon. Similarly, only two children signified a desire to make a second picture, using these materials, whereas 28 would have

liked to paint again, though time restrictions often made this impossible.

Significant differences were observed in the use of space, with crayon or marker pictures usually being centered on the page, not extending into the extreme right or the extreme left quadrants. In only the three pen drawings did a child fill the entire page. Non-representational paintings, on the other hand filled the entire page, and were often layered, as well. Only two paintings used the center only. Placement seemed secondary to use of color and the filling of the paper seemed to be a "goal." The marker and crayon pictures, which were representational in nature, usually indicated a conscious placement of figures and representations (sun at the top, grass at the bottom, figures standing at or close to the bottom). In no case did a child use only a single quadrant of the paper, and, as noted, the most common placement was centered on the paper, using a portion of each quadrant. (See Tables 6 and 7).

When painting, children used broad strokes, filling the paper with color, and, as noted, most of the paintings were non-representational, though exploration of forms and shapes was sometimes observed. While it is probable that the nature of the materials, large brushes and the position of the easel, may have affected the style of production, we

note the same tendency with small brushes, used at a table.

Table 6

Space in Representational and Non-Representational Art

Type of Production	Use of Space							
	entire page	1 ■ 3 4	1 2 3 ■	■ 2 3 4	1 2 ■ 4	1 2 3 4	1 2 ■■	1 2* 3 4
Representational	6	0	0	0	0	0	17	17
Non-Representational	48	0	0	0	0	0	0	2

NOTE: For the purpose of analysis the page was divided into four quadrants, shading indicates the quadrant(d) used in the production.

* This designation indicates use of the center of the paper, incorpororating portions of all four quadrants.

It would appear then that greater ability to control the medium, possible with the smaller brushes, is not the only factor to be considered here. Work with markers and crayons was much more restrained and many children used only a small portion of the page (see Tables 6 and 7). This was especially observable when a paper of identical size was used with both media. When forms were evident in painting they elicited considerable pleasure and enthusiasm. Several children carefully painted the outline of a shape with one color and then "filled it in" with another. Another frequent method of experimentation was folding paper to

produce a symmetrical design.

Table 7

Use of Space in Relation to the Media Employed

Media	Use of Space							
	entire page	1 3 4	1 2 3	2 3 4	1 2 4	3 4	1 2	1 2* 3 4
Paint Large Brushes	19	0	0	0	1	0	0	2
Paint Small Brushes	18	0	0	0	0	0	0	1
Markers Large	10	0	0	0	0	0	3	11
Markers Small	0	0	0	0	0	0	0	5
Crayons	0	0	0	0	0	0	3	0
Other (pen)	3	0	0	0	0	0	0	0

NOTE: For the purpose of analysis the page was divided into four quadrants, shading indicates the quadrant(d) used in the production.

* This designation indicates use of the center of the paper, incorpororating portions of all four quadrants.

Once this technique was "discovered" many variations were devised. It was used for "blot" designs, for conscious repetition, and one child devised a technique of painting each of her fingers a different color, pressing them on the paper, folding it to obtain a reflectional image . . . a technique both messy and popular!

When linear elements were used, we observe a similar freedom and lack of restraint in paintings, as with color fields, and this was the case with both large and small brushes. There was a marked contrast in both form and linear elements in work utilizing crayons and markers, when compared to paints and brushes. With markers and crayons, lines were closed, forms planned, and placement quite intentional. The desire to create symmetry so enthusiastically expressed in painting, did not carry over to the use of crayons and markers.

Table 8

The Relations of Incidence of Shape to Media

Media	Predominating Shapes				
	circular shapes	angular shapes	combined circular angular	tendency toward figural	experi-mentation
Paint Large Brushes	4	5	18	4	21
Paint Small Brushes	0	2	5	3	13
Markers Large	0	1	0	19	0
Markers Small	1	0	2	20	0
Crayons	0	0	6	0	0
Other	0	0	0	2 (cra-pas)	3 (pen)

As the results indicate, these kindergarten children

did indeed, show very marked preferences for certain materials, and saw these materials as having quite different functions. Many judgments were made as to the quality of their work, and the degree of pleasure it afforded them (see Table 4). The findings of this study are quite consistent with observations, made on a less formal basis, over many years of teaching young children, and seem to represent a fair picture of attitudes and artistic productions of children in this age group.

Discussion.

While such a small sample, and the relatively limited scope of the study does not yield conclusive results, a number of interesting patterns have emerged. The children expressed a considerable degree of involvement in their work, there was marked enthusiasm, and a sense of engagement with the task. This was consistently observed, though more noticeable when children were working in the preferred mode. Exclamations of delight, smiles and comments of satisfaction were common.

Perceptions of aesthetic elements were expressed, in comments about line, color and form. These most often took the form of descriptions of the way something "felt" and in an almost sensuous pleasure in these elements. The assignment, by the children, of certain materials to certain

"tasks," however, would seem to rule out the possibility that no other judgment than sensuous pleasure was mode. The Oxford Dictionary defines "aesthetics" as "of or pertaining to sensuous perception" as well as "relating to criticism of taste and perception of the beautiful." Taking this definition in its broadest terms one might conclude that these kindergarteners did, indeed, exercise aesthetic judgment.

Much of Rudolf Arnheim's work seems applicable to this study. He points out, for example, that the "mental life of the young child is intimately bound up with his sensory experience. To the young child, he says, things are what they look like, smell like, sound like" (1974 p. 165). This would seem to be confirmed by the observations made in this study. As Arnheim points out, children have a need for abundant movement, "thus drawing starts out as gamboling on paper," certainly this description fits many of our abstract productions.

The findings of this study, relative to discriminatory use of media, may also be interpreted in Arnheim's sense that "deviations from the norm are not due to deficiencies, but to a remarkably spontaneous sensitivity to the requirements of the medium" (p. 204). He also refers to the "sureness" of intuitive decisions. In this study there was no record of any child being uncertain as to how he wished

to use materials, and most children were able to clearly articulate their perceptions of the functions of the various media.

The marked disinclination of children to change drawings or paintings once they were completed would seem to deserve special attention. This consistent response is especially significant when we consider the ease with which children change roles, or adapt to environmental changes in a role-playing situation, in dramatic play, or when using puppets, and the fluency with which they change and adapt stories. While some art educators consider the refusal to change a completed picture indicative of a lack of aesthetic sensitivity, we might also ask whether this is not an indication of the recognition that a symbol stands as a record of one's creative endeavor and thus has enduring value. This theory is reinforced by the tendency of young children to repeat and refine a symbol which has proved successful or satisfying.

The patterns which have emerged from these observations and interviews have partially answered some of the original questions, and have also raised additional ones. It was found that children are quite demanding of themselves and of their work, that they do, indeed, apply what may be termed aesthetic standards to their work and that they derive very different degrees of satisfaction from

representational and non-representational work. Their preferences seem to focus on what they wish to do with the media and they seem free of the need to please anyone other than themselves. While they enjoyed the adult approval given, it did not seem to be a primary source of motifivation.

Some additional questions arise which are worthy of further study. Among these are: (a) The reasons that children, capable of representational work, so frequently chose the non-representational mode: (b) Whether children use particular "vocabulary" in judging their own work, and that of others.

From the rudimentary evidence, thus far collected, and on the basis of long observation of the art of the young child, I feel that the evidence found in this study was consistent with the development patterns and modes of expression of young children, and feel justified in pursuing further the development of aesthetic sensitivity, as an element of the cognitive growth of young children. Further exploration would, hopefully, reveal some of the origins and precursors of aesthetic sensitivity, clarify whether it can be taught or enhanced, and how this aesthetic sense may relate to their cognitive functions.

C H A P T E R I V

Study 2

Methods

This study attempted to assess children's views of art work produced by unknown peers, and the emerging aesthetic criteria they employ in their judgments of the work of others. Ten sets of stimulus materials were used, replicating the work of children from 4-10 years of age. Care was taken that the pictures would be uniform size, 9 x 12", and each set was standardized for color. Subjects were presented with each set of pictures by the examiner, who presented each set in random order. The design includes extensive inquiry of the child's attitude to the work of unidentified or non-representational and as assessment of the age and level of skill of the artist, as well as preferences for color, subject matter and compositional and stylistic features.

Subjects

The subjects for this study were 56 students enrolled in kindergarten, first grade and second grade in public school in a predominantly upper-middle class community. Ages of the subjects ranged from 5.2 to 8.8 years. Groups

were heterogeneous as to ability and intelligence and the sex distribution was relatively even with 25 boys and 31 girls. The kindergarten children were drawn from a morning half day session and an afternoon half day session, with 10 children selected at random from each group. First and second grade subjects constituted an entire class group.

Materials

Ten sets of pictures were used as stimulus materials, with six sets containing 4 pictures each and the remaining four sets consisting of 3 pictures each. Each of the four picture sets included pictures replicating the work of a 4-5 year old, a 6-7 year old, a 7-8 year old and a 9-10 year old. All were reproduced on 9 x 12' paper and standardized as to color. The six sets, which were classified as "representational" included the following themes: (1) a family group, outline only; (2) a birthday party; (3) the family group with figures "colored in;" (4) a boat on water; and (5) a village. A sixth set comprised four pictures by children in the designated age groups were non-representational and were eliminated from the final scoring - since they did not conform to the standards of either group. Sets 6-10 were non-representational works, of identical size, 9 x 12", but varying in the use of form or color. Sets comprised 3 pictures, one by a recognized adult

artist and two by children in the target age group. For each set either use of color or compositional factors was markedly similar (See Figures 1-10).

Tasks and Procedures

Subjects were seen individually by the examiner, who presented the task as an opportunity to "tell me what you think about some pictures." The setting was informal and the examiner took pains to explain that there were no "right" or "wrong" answers. Each set of pictures was presented in its entirety, with pictures arranged in random order on a table in front of the subject. The same questions were asked for each set of pictures and questions were designed to elicit both spontaneous responses and specific answers to questions relative to subject matter, skill and age of the artist, preference for color, response to orientation of figures and shapes and the subject's judgment of what constituted the "best" picture.

The following questions would be asked of each subject, for each of the ten sets of pictures:

1. What do you think about these?
2. What do you think they're about?
3. How are they alike? How are they different?
4. Who do you think made them?

Figure 1

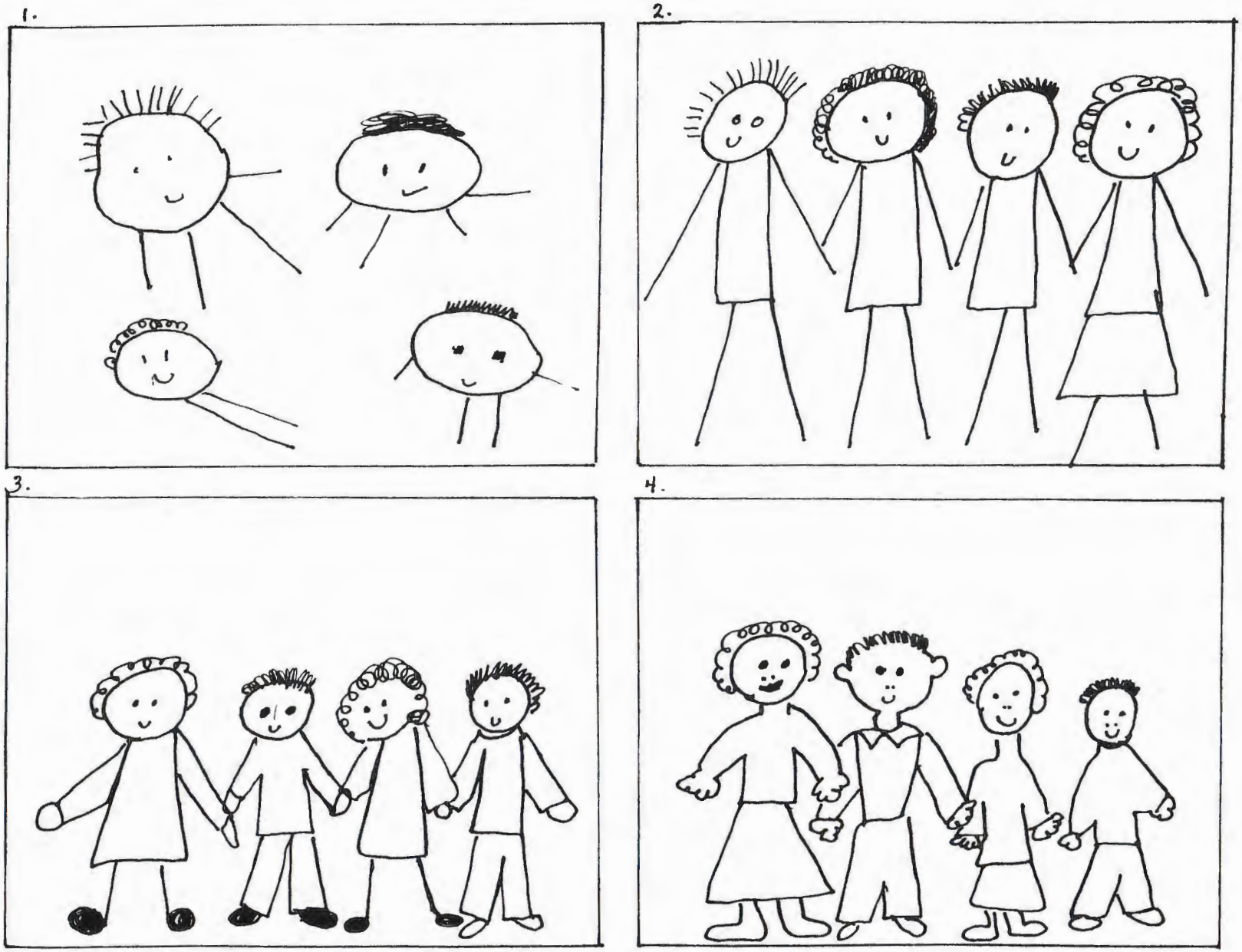


Figure 2

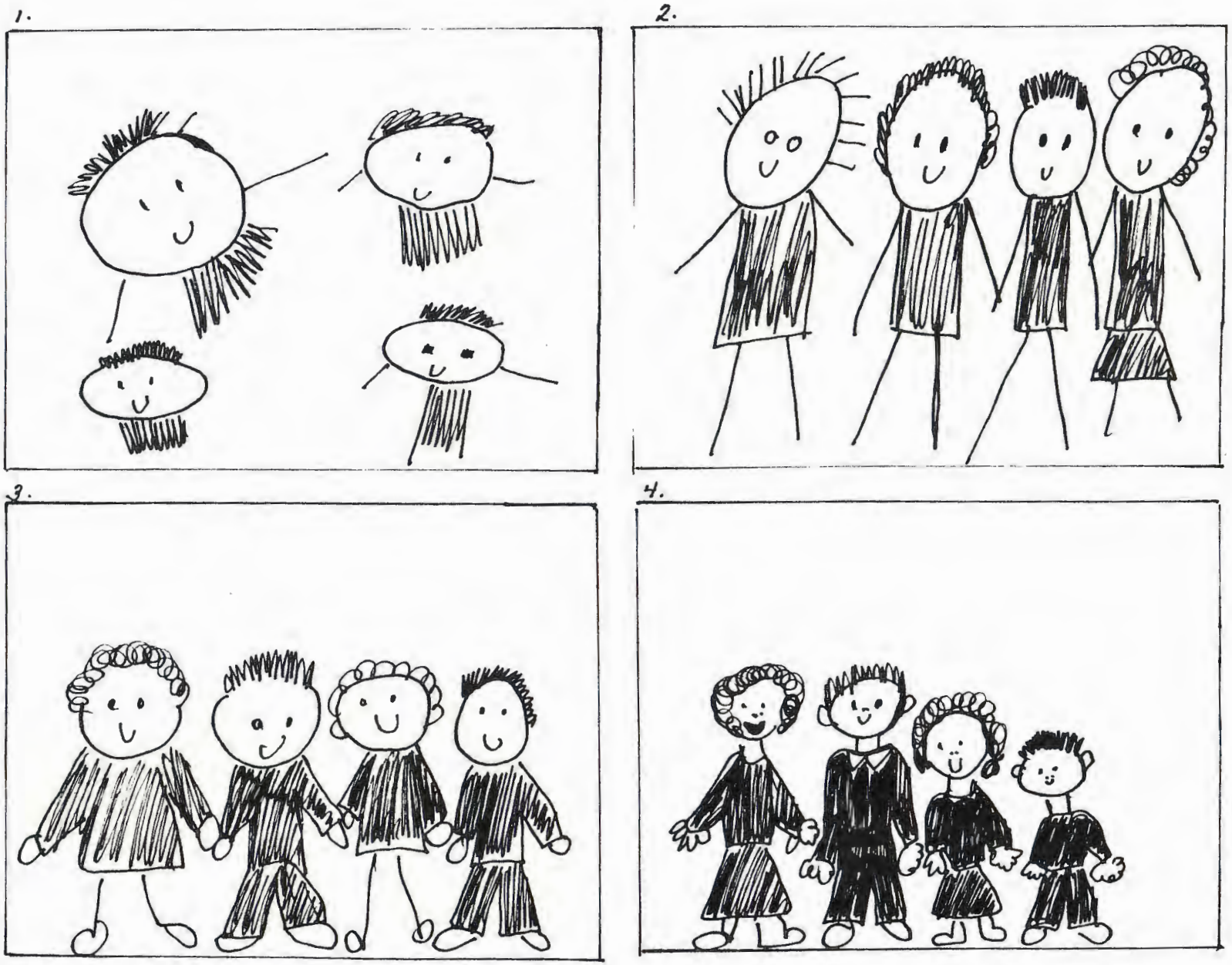


Figure 3

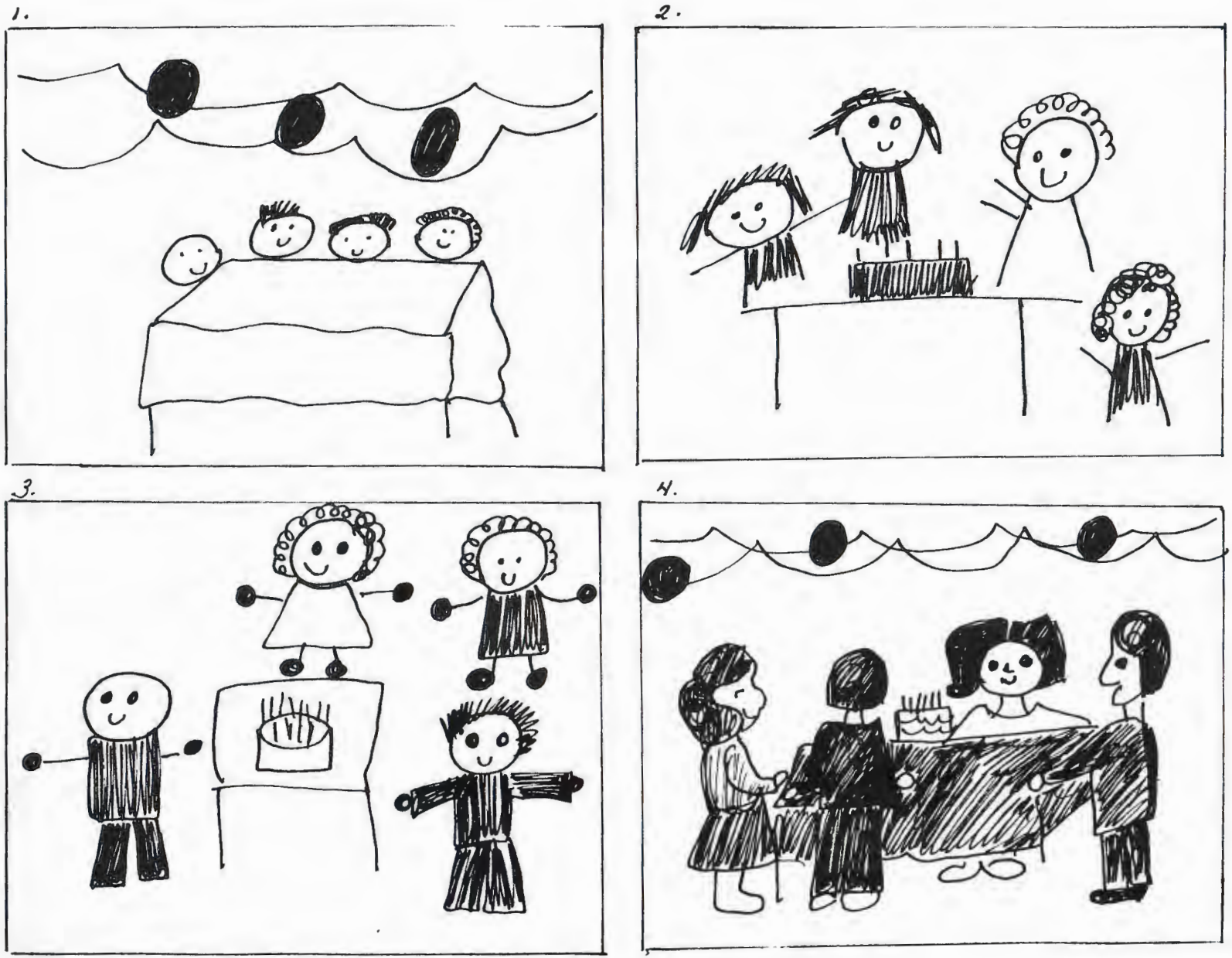
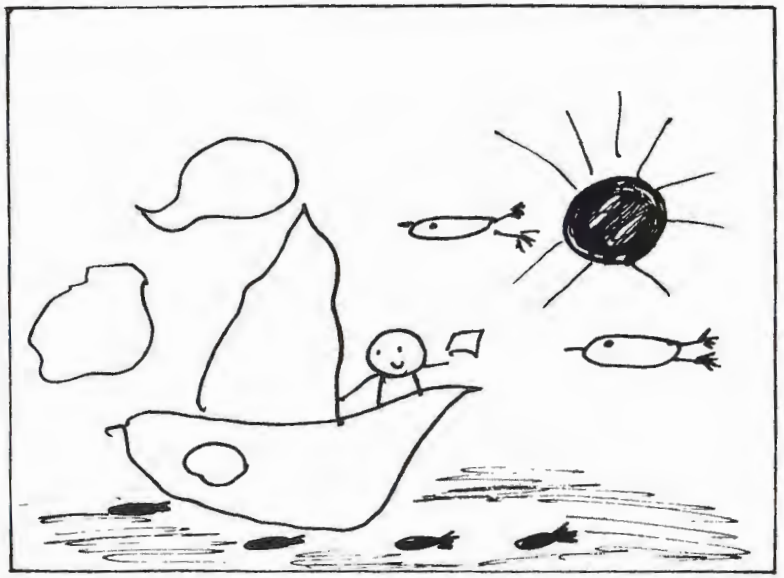


Figure 4

1.



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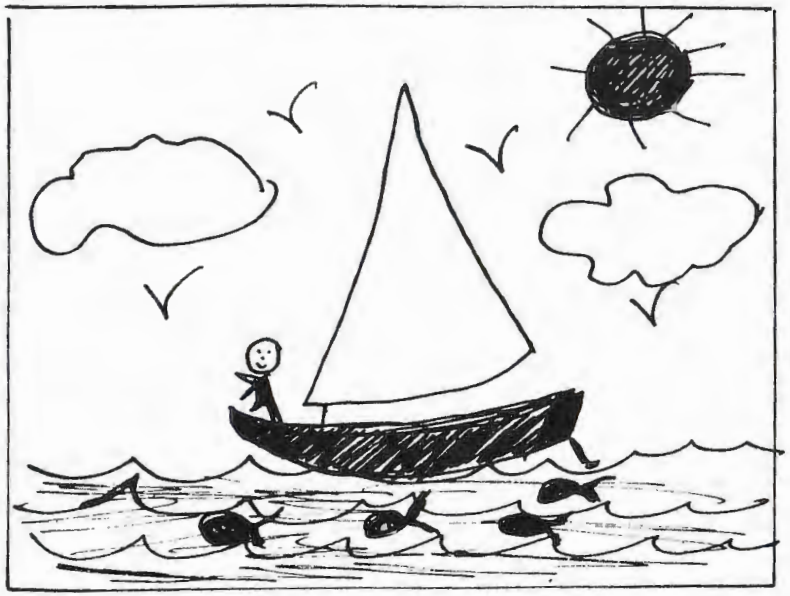

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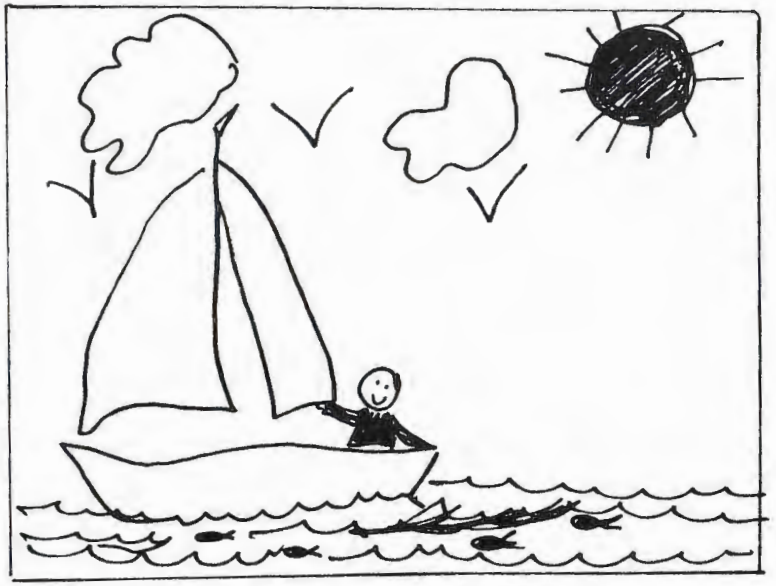
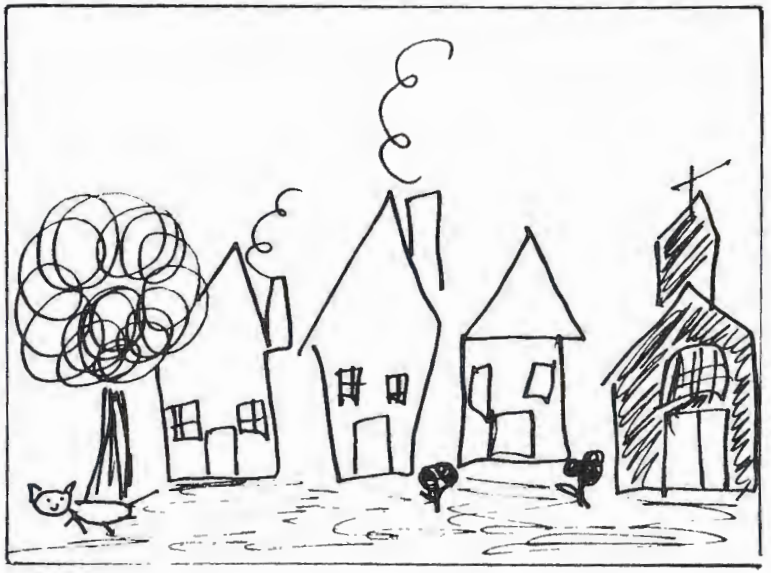


Figure 5

1.

2.



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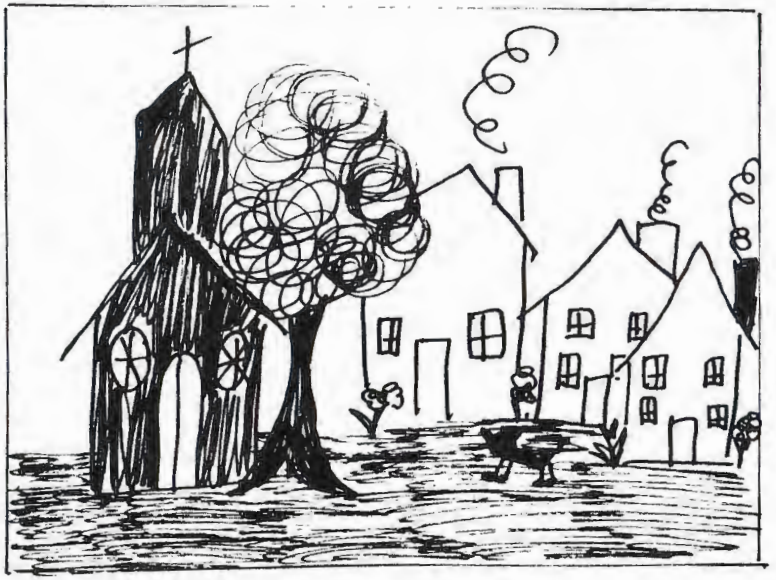
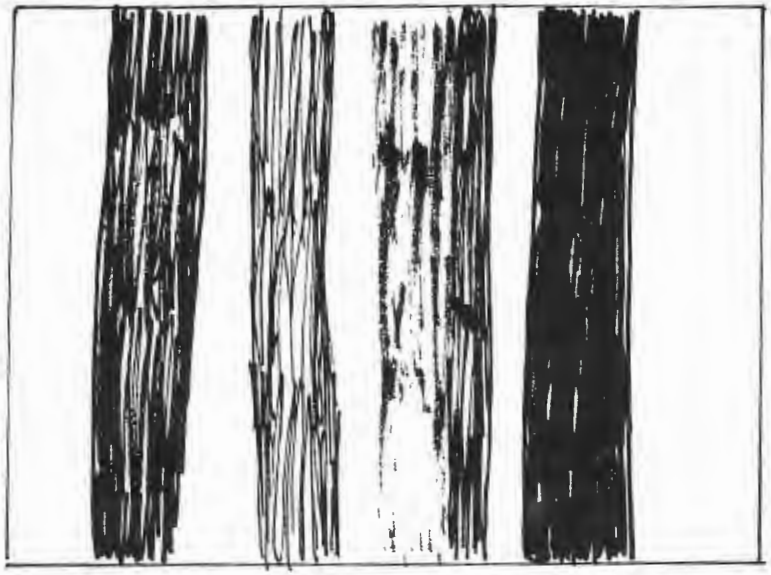


Figure 6

1.



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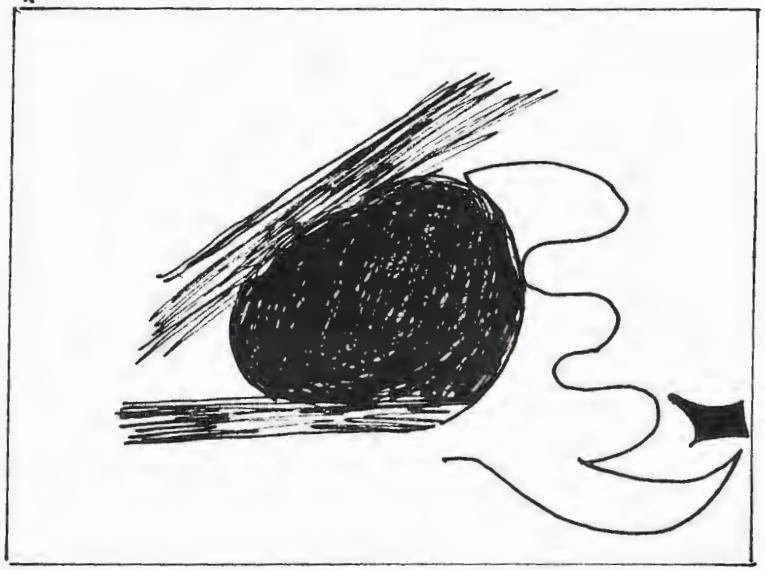

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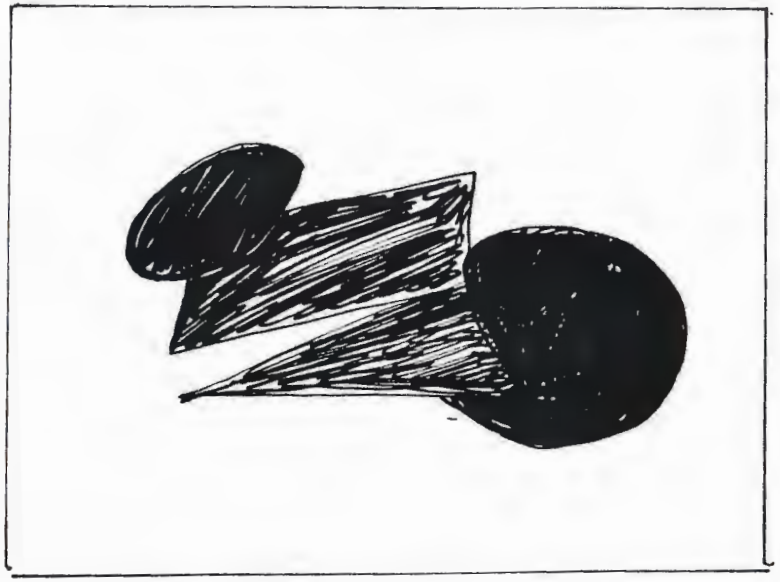

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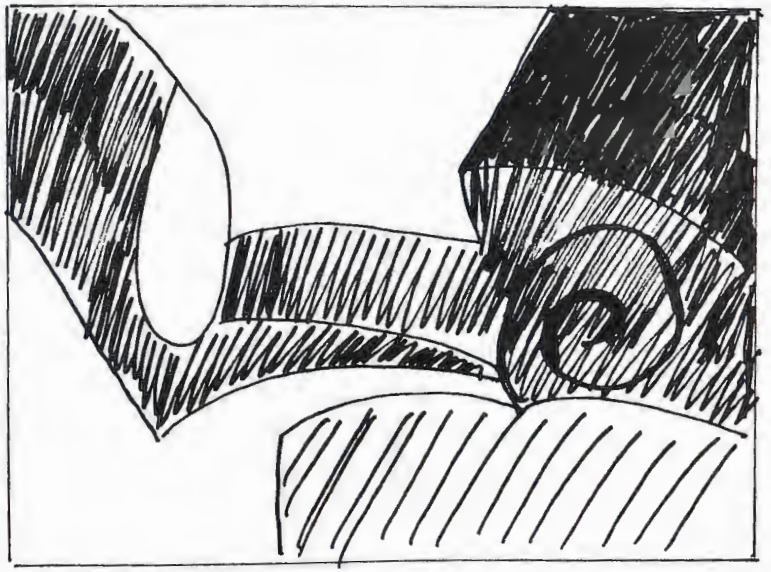

1. Figure 7 A

2.

3.

Figure 8 B

1.

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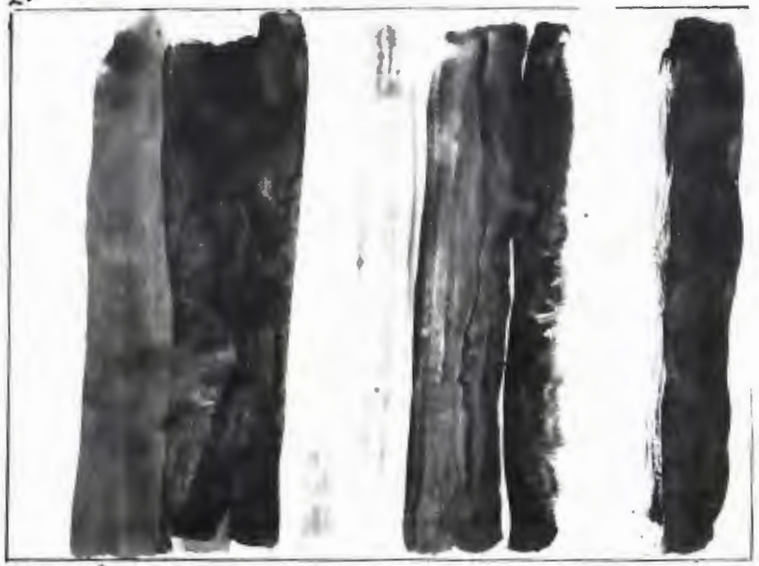

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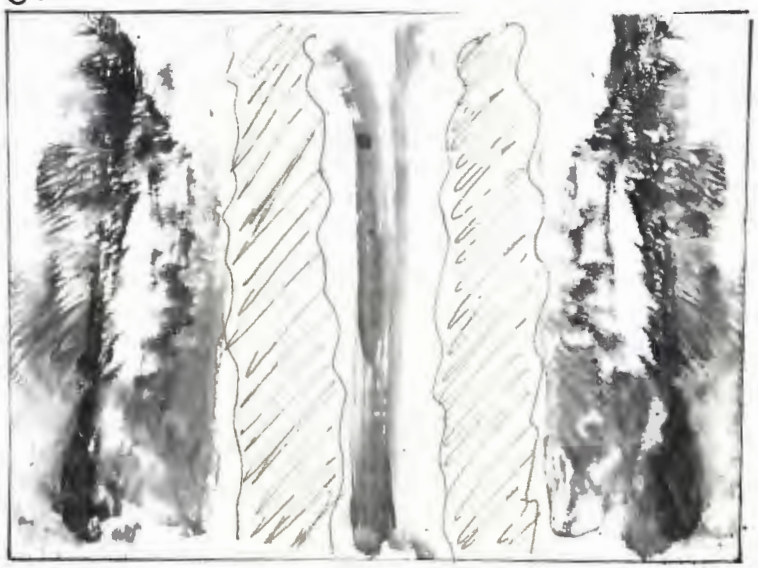


Figure 9 C

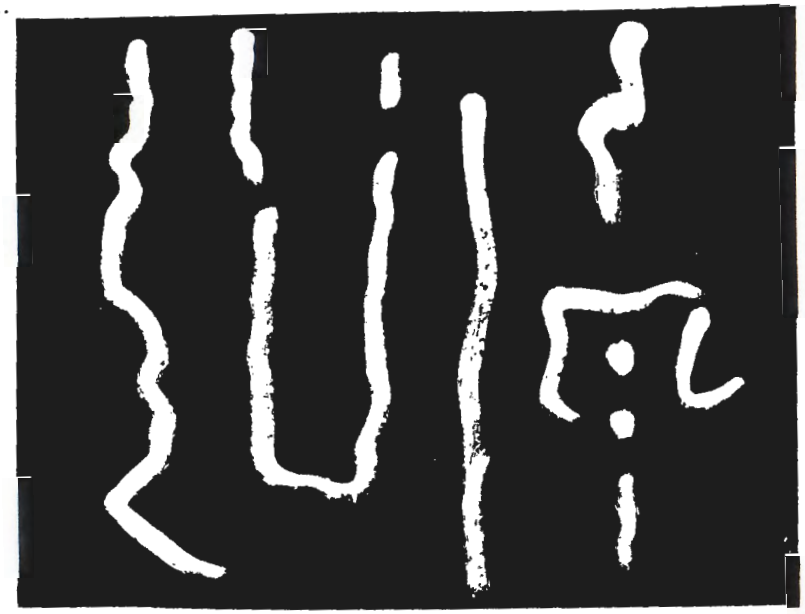
1.

2.

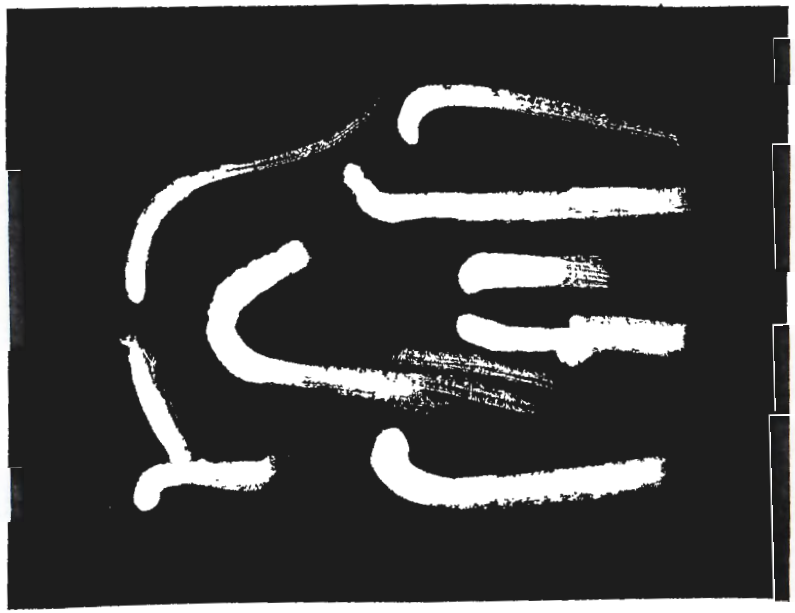
3.

Figure 10 D

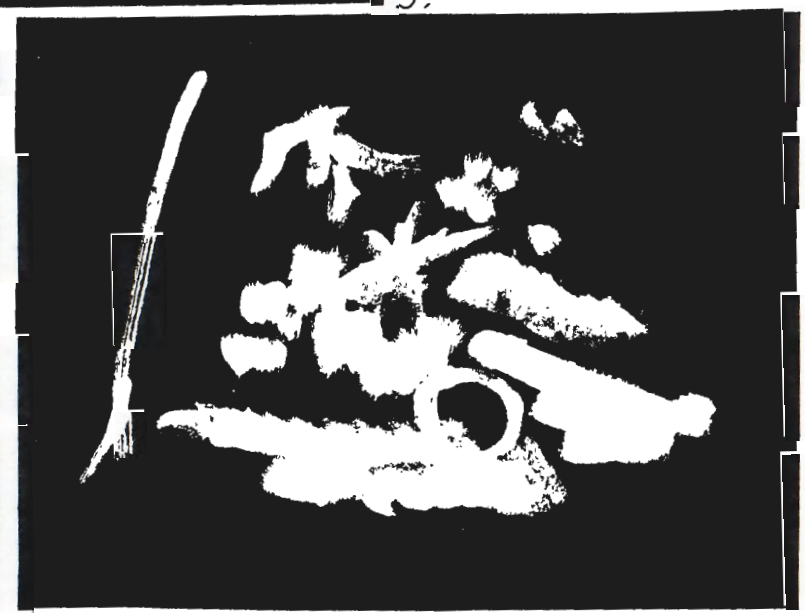
1.



2.



3.



5. How old were the people that made them?

6. Which do you like best?

   a) Can you tell me why?

7. Are there some you don't like?

   a) Can you tell me why?

8. Which is most like what you draw?

9. Which is the best picture of all?

Protocol material included information about individual responses to each set of pictures, including initial response, assessment of subject-matter or content, form, composition, color, detail, and skill of the artist. The material also reveals subjects' preferences, estimation of the age of the artist, perceived similarities or dissimilarities among pictures and similarity to the child's own work.

Anaylsis of the data reveals the following responses. At all three age levels the question, "What is the best picture?" yielded consistent choice of the representational picture by the oldest artist (See Table 9). Children across all three age levels also chose these as their "favorite" picture 87% of the time. The question, "What do you think about these?" yielded few qualitative or aesthetic judgments at any of the age levels. Responses were frequently: "Well, I think kids made them, some older and some younger."

Table 9

Distribution of Reponses to the Question: Which Picture Do You Like Best?*

Representational Work

Age Grade	Number of Responses	Picture Number 1	2	3	4	None
Kindergarten	120	3	4	17	96	0
First Grade	108	1	5	16	86	0
Second Grade	108	0	0	2	106	0
Totals	336	4	9	35	288	0
% of Responses		1.3%	2.8%	10.5%	87%	0%

Non-Representational Work

Age Grade	Number of Responses	Picture Number 1	2	3	None
Kindergarten	80	4	44	19	13
First Grade	72	9	46	17	0
Second Grade	72	18	26	18	0
Totals	224	31	116	65	13
% of Responses		14%	51.3%	29.1%	5.8%

*NOTE: This question was asked for each set of pictures.

Another common response was to name the subject matter, for example, "Well, I think it's a family" or "They're all party pictures." The question "Are there any you don't like?" elicited some very interesting responses. Very few children were willing to designate pictures they did not like. There was a slight increase in willingness to make negative statements among the older children, but overall, there was a tendency to accept work as adequate for the children producing it. In response to the question regarding the age of the artist, our subjects attributed all of the representational work to children, though noting that some were older and some younger than they. This response was made by 100% of the children in relation to the representational work and by the majority in relation to the non-representational as well. A few of the older children did acknowledge that the non-representational work could have been produced by adults.

Responses to the question, "What do you think they're about?" showed children in all age groups able to detect the intended subject matter, even when it was imperfectly represented. Thus children correctly identified the "family," even when figures were all the same size, or lacking significant features. However, identification of the theme might have been based on the most differentiated sample, which then provided the "key" for the less

differentiated sample. Children at all three age levels, when asked what was alike about the pictures, and what was different did comment on figures which were all the same size and viewed this as a negative, suggesting that a thematic reading requires, even by their standards, size differentiation at the very least. This implies not only attention to figural differentiation, but also to compositional principles.

The non-representational work elicited responses to colors and shapes used, "I think they're learning their colors," "These are all about colors and shapes," "Children were experimenting with colors." Many children at all three age levels were unable to give names to these pictures, although many suggested the black and white pictures were "about night," suggesting a common standard, if not an intended theme. The same set of pictures elicited responses from a number of the children which indicated attention to the quality of the brush strokes. Thus, they were described as having "jumpy" or "excited" lines, or lines that "look like electricity." Such responses to line quality were not noted on the representational tasks.

An unexpected finding came in response to the question, "How are the pictures alike, and how are they different?" The children who had before been unwilling to specify a picture they did not like, revealed in their

answer to this question that their judgments were guided by a set of implicit aesthetic principles, and this was so even for the youngest child. Children frequently noted the faulty orientation of figures or objects, noting, "They're all tippy" or "the houses are all falling down." Here too we see the clearest assessment of the artist's ability. "Some kids draw better," "They put more things in it" or "These are really pretty messy!" The ability of the artist to make things look "real," was appreciated by all three age groups, and especially by the first and second graders. In both the representational and the non-representational work children favored greater detail, or the inclusion of many elements. They frequently commented that a picture was good because it "Has lots of things in it" or "I like it because it has lot of colors and shapes." The omission of significant details was frequently noted, but simply as a difference, seldom as a basis for liking or disliking a picture. Thus, children did not dislike the birthday party picture in which the cake was missing, but did express concern over its absence.

In the non-representitional work, children responded to similarities in forms and colors, the very elements which governed our selection of these pictures as "sets." They commented, "Well, they're not about anything" and "I like all the different colors and shapes." Negative responses

were noted to the rather muddy colors and unusual combination of colors in set A, while preference was shown for clear, bold colors, and for variety of colors. Children in all three age groups answered the question, "Who do you think made them?" in terms of the age of the artist. Most children accurately attributed pictures 1 and 2 in each set to 4 to 6 year olds. A surprising finding was that, of the entire group of 56 children, not one attributed any of the representational work to adults or, in fact, to a child over eight. This finding indicates on the on hand the fairly accurate concept children have of drawing systems employed by others, especially children close to their own age and on the other hand an over estimation of the ability of 8 year olds. While these children showed an awareness of compositional systems in their response to the representational pictures, they apparently could work beyond faulty representation, and give it meaning. A stong experiential component is seen in children's comments that some of the pictures are "Like what I used to do" or "I did stuff like that when I was really little!" It would appear, then, that for this age group work done by "really little kids," was acceptable, despite its deficiencies, as expressive of their abilities.

Findings for the non-representational sets were less conclusive. Many children stated that they had no idea who

Table 12

Responses to Work Most and Least Liked --

Group 1/Kindergarten

Representational Pictures

	# Subjects	Theme		Color		Orientation		Detail		Personal Assoc.	
	20	+	-	+	-	+	-	+	-	+	-
Set 1											
1		0	0	0	0	0	3	0	0	0	0
2		0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	1	0
4		3	0	0	0	1	0	13	0	3	0
Set 2											
1		0	0	0	0	0	6	0	6	0	0
2		0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	3	0
4		11	0	0	0	1	0	9	0	6	0
Set 3											
1		0	0	0	0	0	0	0	0	0	0
2		0	0	0	0	0	0	0	0	0	0
3		5	0	0	0	0	0	0	0	0	0
4		5	0	0	0	3	0	15	0	0	0
Set 4											
1		0	0	0	0	0	0	0	0	0	0
2		0	0	0	0	0	0	0	0	2	0
3		1	0	0	0	0	0	0	0	0	0
4		9	0	0	0	1	0	8	0	2	0
Set 5											
1		0	0	0	0	0	0	0	0	0	0
2		0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	1	0
4		9	0	0	0	6	0	13	0	1	0
Totals		43	0	0	0	12	9	58	6	19	0

Non-Representational Pictures

Set A											
1		1	10	0	11	0	0	0	0	0	0
2		1	10	10	10	0	0	0	0	0	0
3		0	10	3	11	1	0	0	0	0	0
Set B											
1		0	0	0	0	0	0	0	0	0	0
2		3	0	20	0	0	0	0	0	0	0
3		0	0	9	0	0	0	0	0	0	0
Set C											
1		0	0	0	0	0	0	0	0	0	0
2		4	0	2	0	6	0	7	0	0	0
3		3	0	2	0	0	0	3	0	0	0
Set D											
1		0	0	1	0	0	0	5	0	0	0
2		8	0	0	0	0	0	6	0	0	0
3		2	0	0	0	0	0	4	0	0	0
Totals		22	30	47	32	7	0	25	0	0	0

Table 13

Responses to Work Most and Least Liked --

Group 2/First Grade

	# Subjects	Theme		Color		Orientation		Detail		Personal Assoc.	
	18	+	-	+	-	+	-	+	-	+	-
Representational Pictures											
Set 1											
1		0	0	0	0	0	3	0	0	0	0
2		0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0
4		4	0	0	0	1	0	13	0	0	0
Set 2											
1		0	0	0	0	0	2	0	13	0	0
2		0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0
4		14	0	0	0	0	0	10	0	0	0
Set 3											
1		0	0	0	0	0	0	0	0	0	0
2		0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0
4		2	0	0	0	3	0	13	0	1	0
Set 4											
1		0	0	0	0	0	0	0	0	0	0
2		0	0	0	0	0	0	0	0	0	0
3		1	0	0	0	0	0	3	0	1	0
4		1	0	0	0	0	0	12	0	6	0
Set 5											
1		0	0	0	0	0	0	0	0	0	0
2		1	0	0	0	0	0	2	1	0	0
3		1	0	0	0	0	0	3	0	2	0
4		1	0	0	0	6	0	14	0	3	0
Totals		15	0	0	0	9	5	70	14	13	0
Non-Representational Pictures											
Set A											
1		1	10	0	11	0	0	0	0	0	0
2		1	10	11	7	0	0	0	0	0	0
3		0	10	3	11	0	0	0	0	0	0
Set B											
1		0	0	0	0	0	0	0	0	0	0
2		3	0	20	0	0	0	0	0	0	0
3		6	0	7	0	0	0	0	0	5	0
Set C											
1		0	0	2	1	0	0	5	0	0	0
2		0	0	0	0	0	0	9	0	0	0
3		0	0	1	0	0	0	8	0	2	0
Set D											
1		2	0	0	2	0	0	6	0	0	0
2		4	0	0	0	0	0	8	0	0	0
3		3	0	0	0	0	0	8	0	2	0
Totals		20	30	46	32	0	0	44	0	9	0

Table 14

Responses to Work Most and Least Liked --

Group 3/Second Grade

Representational Pictures

	# Subjects	Theme		Color		Orientation		Detail		Personal Assoc.	
	18	+	-	+	-	+	-	+	-	+	-
Set 1											
1		0	0	0	0	0	3	0	11	0	0
2		0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0
4		4	0	0	0	0	0	18	0	0	0
Set 2											
1		0	0	0	0	0	2	0	13	0	0
2		0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0
4		2	0	0	0	0	0	16	0	5	0
Set 3											
1		0	0	0	0	0	0	0	10	0	0
2		0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0
4		2	0	0	0	3	0	14	0	1	0
Set 4											
1		0	0	0	0	0	0	0	0	0	0
2		0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0
4		2	0	0	0	3	0	14	0	0	0
Set 5											
1		0	0	0	0	0	5	0	0	0	0
2		0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0
4		0	0	0	0	5	0	14	0	0	0
Totals		9	0	0	0	11	10	68	0	8	0

Non-Representational Pictures

Set A											
1		0	0	0	8	0	0	0	0	0	0
2		0	0	0	8	0	0	0	0	0	0
3		0	0	0	10	0	0	0	0	0	0
Set B											
1		2	0	9	0	0	0	0	0	0	0
2		3	0	16	0	0	0	0	0	0	0
3		0	0	3	0	0	0	0	0	4	0
Set C											
1		0	0	2	0	0	0	5	0	0	0
2		0	0	0	0	0	0	0	0	0	0
3		0	0	1	0	0	0	2	0	0	0
Set D											
1		3	0	0	2	0	0	4	0	0	0
2		2	0	1	0	0	0	3	0	0	0
3		0	0	0	0	0	0	5	0	6	0
Totals		10	0	30	28	0	0	19	0	10	0

that, with the exception of the most advanced composition, they so accurately assess the age of the artists in the case of the representational work, indicates this awareness as well. Children in this age group quite accurately "read" the subject matter, even though in many cases cues were lacking in actual representation. While differences and inaccuracies were noted, as for example in the family picture (numbers 1 & 2), in which figures were all the same size, children accepted them as representations of a family, though indicating by their comments that size differentiation was an important compositional cue to meaning. Faulty orientation, people "falling down" or houses "all tippy" was similarly noted, but apparently considered acceptable work for the "little kids" to whom it was attributed by these children. Comments that "They probably did their best" or, "They really tried," were characteristic of this age group.

The kindergarten children often justified their preferences in terms of personal association, for example, "I could (or would like to) make one like that" or "It looks like fun." Responses to color were absent in judging representational work, but formed the most frequent basis for judgment in the non-representational work. Children preferred clear, bright colors and were attracted to the colors produced by mixing. Richness of detail was also a

pervasive standard for this group, for both representational and non-representational work. There was some sensitivity to the expressive qualities of the abstract work, as children referred to "jumpy" or "excited lines" or lines that "look like electricity." While these kindergarteners were reluctant to specify pictures they disliked, their awareness of likenesses and differences revealed an application of aesthetic principles and a concept of developmental patterns that was quite accurate.

Summary profile, first grade.

As with the kindergarteners, first grade students readily identified the work shown them as "kid's work," though two mentioned that adults sometimes "do stuff like that" when referring to the non-representational work. They, too, readily identified subject matter, even if representation was flawed. Though they were often ready to accept work as characteristic of that done by "little kids," they showed much more inclination to judge the work "messy" or "scribbly." They consistently chose pictures numbered 3 and 4 in each set as their favorites, and referred to work done by the youngest child (picture # 1) as work they did not like "too much," usually qualifying this by noting that it was probably the best these younger children could do.

This group of first graders made many more comments

about the non-representational work, and seemed especially disturbed by the lack of easily-recognizable subject matter. Many comments reflected this concern, "Well, they aren't about anything," "It doesn't really have a name." Correspondingly, they showed strong favorable responses to the more detailed representational work. Responses of this group indicated a preference for bright and varied colors and realistic color in representational work. The responses of this group of first graders indicate a developing and maturing awareness of aesthetic characteristics of art work, and a more discerning and critical approach to samples of drawings and paintings.

Summary Profile, Second Grade

The second grade subjects were most interested in realism as a standard for "good" work. Many comments revealed the increasing importance to these seven and eight year olds of this characteristic. Several children in this group showed an awareness of the pictorial advantage of showing depth, for example, "Things are sort of in front of each other," "Some are close and some are far away, like things really are." These second graders were, as a group, much more critical of work which was characterized by faulty orientation or poor figural differentiation, though retaining a sense of tolerance for those who created these

pictures. These children showed a strong preference for realistic representation, but also showed considerable tolerance for the non-representational work. Several mentioned that these were called "abstract," or that, "A picture doesn't have to have a name." It would seem that, despite their outspoken preference for realism in drawing, they were able to utilize their developing aesthetic sensitivity, in combination wih cultural influences such as visits to museums, to evaluate a wider range of work. Just as the younger students accepted the flawed productions as legitimate expressions of the art of pre-schoolers, so too did these older students view the possibility of a variety of artistic expression. This group of second graders gave us evidence of a constantly changing and maturing aesthetic awareness or sensitivity, as well as a growing awareness of the ways in which these standards may be articulated.

Discussion

This study provides confirmation for the thesis that young children do employ aesthetic principles when assessing art work other than their own. Students in all three age groups showed an ability to acknowledge the validity of a variety of representational and non-representational works, at least for individuals of a particular level of age or experience. Their relatively accurate assessment of the age

of the artists represented in the study indicates an awareness, even among the younger children who, though noting that some of the drawings were flawed, accepted them as appropriate, on the basis of the assumed age of the artist, his experience or his intent. In the case of non-representational work children noticed the use of color and shape. Responses indicated attention to the orientation of objects or figures, to color, and especially, to the richness and variety of detail, and this was so for both representational and non-representational works. Children in all three age groups showed an overwhelming preference for those pictures in both representational and non-representational sets, which included the largest number of elements or the most varied elements, and this was often expressed in their choice of these pictures as "best" as well as their "favorite" picture. Children thus indicated a preference for compositional complexity, while retaining a tolerance for those pictures which included only a few elements. Children also showed the ability to construe the meaning of a drawing in which few compositional elements were present. It is interesting to note that his was so only for the representational work.

Children in all three age groups quite accurately assessed the age of the artists and yet, when asked what they might do themselves, considerably overestimated their

own ability. There was a strong tendency to select the picture they liked best as that most like what they would do. This would seem to indicate a lack of differentiation between "liking" and "doing." Two factors may be at work here, one a recognition of what they would like to do, and another the notion that this goal is, at some point, attainable.

A number of our original questions were answered by this study and some new ones have emerged. While it is clear that children in this age group can, and do apply aesthetic standards and, while we can discern a developmental progression in their responses, the limitation of the stimulus materials in this, as in other studies, must be questioned. Though the art work used in this study represented work done by children, and in this aspect was unique, we are still faced with the problems that result from presenting children with pictures of uniform size, lacking true color and textural cues. While such stimulus material, with its imposed uniformity, does provide important controls, it also constrains the response and thus, introduces biases. Though the stimulus materials presented the subjects with more realistic approximations of children's work than most studies, done in the past, one would suspect that the relatively dispassionate reaction of the children to the questions, and their view of this task

as more an academic rather than an aesthetic one, might be directly related to the nature of the stimulus materials. The presentation of actual art work, both by children and adults, providing the richest possible color and textural cues, might have enriched the response. While recognizing the need for standardization, it would seem that presentation of rich and varied cues would provide a much more accurate picture of the range of aesthetic responses possible to young children. We ought also to consider that these children may have lacked significant experience with the media employed, especially in the case of non-representational works. The classroom settings appeared to provide little opportunity for spontanous art work, even at the kindergarten level. Easels were seldom used and most art work seemed to be teacher-directed and project oriented. We ought to consider whether our results might have differed significantly if children had more recent, or more regular experience with a variety of media and techniques. Thus cultural and environmental influences can already be seen as significant factors in the responses of these 5 -7 year olds.

C H A P T E R V

Overall Discussion and Conclusions of Research

Overall, the second study bears out several findings of the first one, especially those regarding preference for what has been termed "realism" in representational work. This was reflected in the first study by the appropriate choice of materials to achieve differentiated figures, and in satisfaction expressed when this was achieved. In the second study, the majority of children in all three age groups, selected as "best" the picture in each set which was the most detailed and realistic looking. The preference for bright, clear colors and pleasure in mixing and changing colors, was consistent in both studies. An awareness of a developmental component in skill and interest was also consistent for the two studies. In the first study children characteristically expressed satisfaction with the works of art which they produced, but more clear differentiations as to the possibilities of the media with which they worked and were quite accurate in their assessment of their own abilities. In the second study subjects were able to attribute varying levels of skill to the different age groups represented, as well as to the media used. Both groups reflected in their judgments a similarity

of experience with the materials and commonalities of values and standards, which strongly suggest cultural influences and the educational practice of the teacher. This is perhaps most clearly seen in the enthusiasm of the first group for non-representational work, and the reluctance of the second group to make negative judgments. The virtue of using, as subjects, children at work on their own drawings and paintings also emerges when we observe this disinclination to make negative evaluations of another child's work. The reluctance of children in the first group to change a picture once it was completed suggests the view of such work as a personal statement, a symbol which may be repeated and refined, and contrasts startlingly with children's patterns of play in which roles are constantly changing.

The startling difference in response to the task presented in Study 1 and 2 deserves attention, and suggests a strong experiential-environmental component, both in response patterns and in the level of sensitivity expressed. While children in the second study were cooperative and willing to respond to questions, the sense of engagement with the task, so evident in the first group, was totally absent. It seems important to note that the classrooms from which these children came seemed to provide few visible aesthetic stimuli. Few art works, either by adults or

children were displayed, and those few reflected a project-oriented approach to art. This presented a marked contrast to the first situation, in which art work by both children and adults was part of a varied, and ever-changing display. Further contrasts were noted in the availability of materials and encouragement of their spontaneous use. Children in the first group had access to a wide variety of materials and were encouraged to experiment and explore the possibilities of these. Children in the second group took part in teacher-directed activities and in the two month long observation period, no spontaneous use of art materials was noted, easels remained unused and displays were infrequently changed. It was especially interesting to note that, in no instance, did a child in the second group express a desire to create a picture, or to employ any of the techniques represented in the stimulus materials. To return to the Oxford Dictionary definition of aesthetics as "of or pertaining to sensuous perception," this characteristic, so strongly present in the first group was not noted at all in the second.

It would seem likely that the similarity of experience both with materials and in values and standards encouraged by the teacher, markedly affected the responses of both groups. This was reflected in the reluctance of children in the second group to make negative comments about the art

work of others, seemingly indicating a teacher-encouraged standard of tolerance. The almost uniform response to the pictures in Set 6 as "made by kids learning their colors," suggests a common experience shared by these children. As we have noted, both studies address questions about children's assessment of their own work and that of their peers, their concept of artistic development as reflected in age-related questions, their views of imperfect representations and their ability to note similarities and differences. As is to be expected in an exploratory study, a number of new questions must now be faced. Most notable among these questions is the role which individual involvement in production, i.e., the actual practice of making art plays in perceptual tasks and aesthetic responses. We might ask, "Why do children in Study 2 respond so much less favorably to non-representational work than children in Study 1?" A further question might be the ability of children to assess their own artistic capabilities. Far more accuracy was noted in the first study, when children were involved in production, than in the second, where a good deal of fantasizing took place. Our findings regarding preference, and assessment of the "best" picture are consistent with the Hart-Goldin-Meadow study (1984), which found that children's choice of the "best" picture among pictures done by other children, was

consistently that done by the oldest child.

A pervasive question for this, as for other studies relates to the question of stimulus materials. Children in the second group viewed work of standard size, protected by transparent plastic, thus diminishing the impact of color and textural cues. While this work represented that of children in their age group, it was, clearly, not their own. Our work shows significantly different results from those of previous researchers, confirming aspects of aesthetic response not previously noted. The involvement in children in both the production and the perception tasks, in the first study would, no doubt, account for these varied responses. Even in the second study, where the production element was absent, the work represented principles common to the subjects' own work. The absence of adult-imposed standards of aesthetics, based on a philosophical stance, adult art used as stimulus materials and adultomorphic language, allows a clearer perception of the child's judgments and the means he employs to express them.

Both studies provide us with new insights into children's aesthetic awareness and sensitivity and both have identified a strong cognitive-developmental component, evident not only in children's changing views and responses, but in their awareness of skills and abilities, which gives evidence of reflection, monitoring, and a dialogue between

production and inspection. It would seem that the greatest value of these studies has been the highlighting of the effects of experience and involvement with the arts on the aesthetic sensitivity of young children. The studies seem to confirm both the presence of, and the developmental nature of aesthetic awareness, and to suggest further attention to the most effective means of observing and, ultimately, enhancing their emergence.

The results further suggest that we pursue the examination of the production-perception issue and focus our attention on the varied verbal and non-verbal expression which children use to indicate aesthetic awareness or sensitivity. Art critic Meyer Shapiro, in a commentary on the works of Willem De Kooning and Jackson Pollock, could well be describing the work of the young child when he writes,

> it aims at coherent style. What I am describing, rather, are qualities which make up the expressiveness of this art, its physiognomic so to speak. We see excited movements, scattered spots, dashes and fervent streaking, an explosive release. (undated catalog, p. 20)

Richard Pousette-Dart, writing about his own work, comments:

> Art for me is the heavens, forever opening up, like assymmetrical, unpredictable, spontaneous

> kaleidoscopes. It is magic, it is joy, it is gardens of surprise and miracle. It is energy, impulse. It is question and answer. It is total in its spirit. . . in truth art is the adventure of our own growth. (p. 125)

Adolph Gottlieb notes, "I love all paintings that look the way I feel!" (p. 71), and Ad Reinhart,

> Perhaps pure painting is a direct experience and an honest communication. Perhaps it is creative completeness and total sensitivity related to personal wholeness and social order because it is clear and without extra aesthetic elements.

When mature artists and critics use such terms to describe their experience with art, the application of a formal philosophical terminology to the child's aesthetic response seems quite inappropriate. The challenge remains to discover more effective means of tapping the source of their enthusiasm and engagement with art and to provide more effective means for its expression.

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